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(NASA-CR-175664) A SLAM II SIMULATION MODEL FOR ANALYZING SPACE STATION MISSION PROCESSING REQUIREMENTS Final Report (University of Central Florida) 112 p HC A06/MF A01 CSCL 22B G3/18

N85-26853

Unclas 21382

FOR NASA GRANT NO. NAG10-0013

ENTITLED

A USER-FRIENDLY SIMULATION MODEL FOR ANALYZING SPACE STATION MISSION PROCESSING REQUIREMENTS

COVERING THE PERIOD SEPTEMBER 11, 1984 TO MAY 11,1985

A FINAL REPORT ENTITLED

"A SLAM II SIMULATION MODEL FOR ANALYZING SPACE STATION MISSION PROCESSING REQUIREMENTS"

BY

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A SLAM II SIMULATION MODEL FOR ANALYZING SPACE STATION MISSION PROCESSING REQUIREMENTS

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May 1985

ABSTRACT

Space station mission processing is modeled via the SLAM II simulation language on an IBM 4381 mainframe and an IBM PC microcomputer with 620K RAM, two double-sided disk drives and an 8087 coprocessor chip. Using a time phased mission (payload) schedule and parameters associated with the mission, orbiter (space shuttle) and ground facility databases, estimates for ground facility utilization are computed. Simulation output associated with the science and applications database is used to assess alternative mission schedules.

INTRODUCTION

In order to schedule the large number of missions planned for the next several decades, NASA personnel are interested in optimizing the utilization of ground-based equipment necessary for pre- and post-flight processing. Within the processing facility, several teststands will be available for processing material to be launched to the space station (SS) or returned from the SS (referred to as downflow) via the orbiter (space shuttle). Each teststand can hold the equivalent

area and volume associated with one cargo bay in the orbiter and it will be assumed that the processing of material on a teststand requires three months(one quarter). Thus,if only two teststands were available, a total of eight teststand-quarters(TQs) worth of payloads could be processed during one year. The problem statement is: given the number of available teststands with specified usage restrictions (more on this later) and the list of proposed missions, how should the teststands be scheduled to complete the mission requirements most efficiently.

The interpretation of the term "mission" is important in the following discussions. A mission refers to all the launch and downflow operations, perhaps over a period of years, associated with a particular set of objectives. For example, a mission might require two launches during the first quarter of 1990, one downflow operation in the second quarter of 1991 and both a launch and a downflow once per year during 1992-2000. The term payload transport(PYLDXPRT) will be used to refer to any cargo for a mission which is scheduled for a single launch or downflow operation. With the SLAM attribute numbers in parentheses, each PYLDXPRT has the following set of attributes (the notation A1 is used instead of ATRIB(1), A2 instead of ATRIB(2), etc.):

a. the mission number(A1);

b. the year of launch or downflow(A2);

c. a cargo bay equivalency(CBE) index- this number represents the percent of a single teststand utilized by the PYLDXPRT (A4, 0<A4<1);

d. a random number for altering the order in which PYLDXPRTs are considered during successive runs of the model for a given year (A5, 0<A5<1);

e. the TQ index number set by the model for a PYLDXPRT during a particular run in a given year(A6, A6=1,2,...,4*(number of available teststands)+1);the extra '1' is for overflow which is discussed below;

f. a downflow-launch indicator(A7=0 for downflow, A7=1 for launch);

g. a nonhazardous-hazardous material indicator(A8=0 for nonhazardous, A8=1 for hazardous);

h. a low-polar orbit indicator(A9=0 for low orbit, A9=1 for polar orbit).

If there are no restrictions, each teststand can hold any number of PYLDXPRTs during any one quarter, as long as the sum of the CBE values is no greater than one. However, it may be necessary to segregate PYLDXPRTs; e.g., only allow PYLDXPRTs with A7=1,A9=1 or A7=1,A9=0 or A7=0,A9=1 or A7=0,A9=1 on a single teststand during any quarter(the or is exclusive here). This latter example illustrates what is meant by segregating on A7,A9. There are a total of eight different rules or restrictions, any one of which may be in effect during the period of time of interest. The eight possible rules are:

rule 1- segregate on A7,A8,A9
rule 2- segregate on A8,A9
rule 3- segregate on A7, A9
rule 4- segregate on A7,A8
rule 5- segregate on A9 only
rule 6- segregate on A8 only
rule 7- segregate on A7 only
rule 8- no segregation in effect.

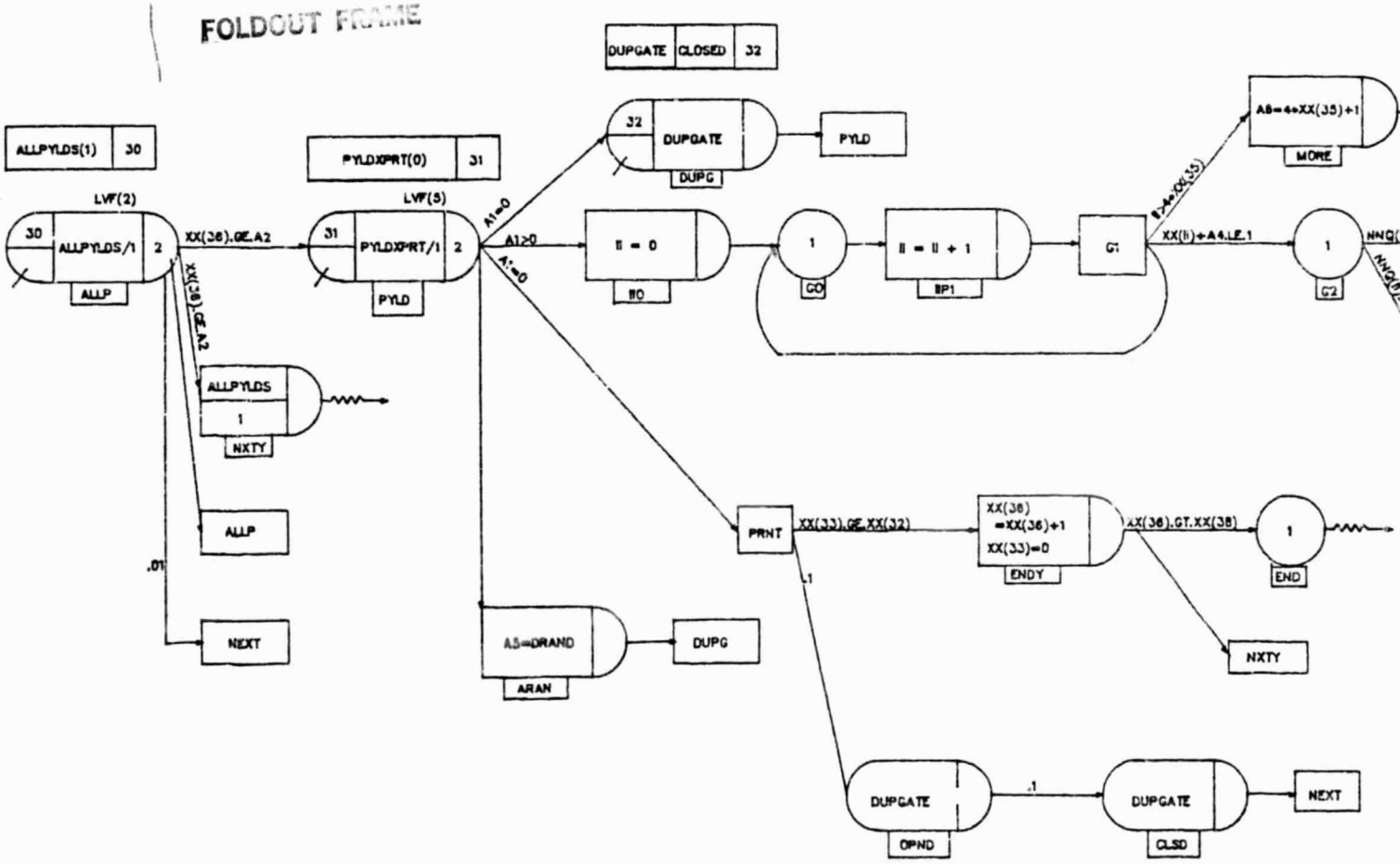
For a given ordering of PYLDXPRTs (entiies in the SLAM model), a user-specified rule number and a given number of teststands, the teststand utilization (TSU) SLAM model determines an efficient allocation of PYLDXPRTs among teststands.

THE TSU SLAM MODEL

The TSU SLAM model, a combination of SLAM(network) and Fortran(discrete) code, is used to estimate the most efficient utilization of TQs for the PYLDXPRTs under consideration when seven teststands are available. The network portion of the TSU model is shown in Fig. 1 below. The SLAM II statements for Figure 1, including the mission data, are shown in App. A.

Each entity in the model(with attributes A1-A9 defined earlier and A10 defined

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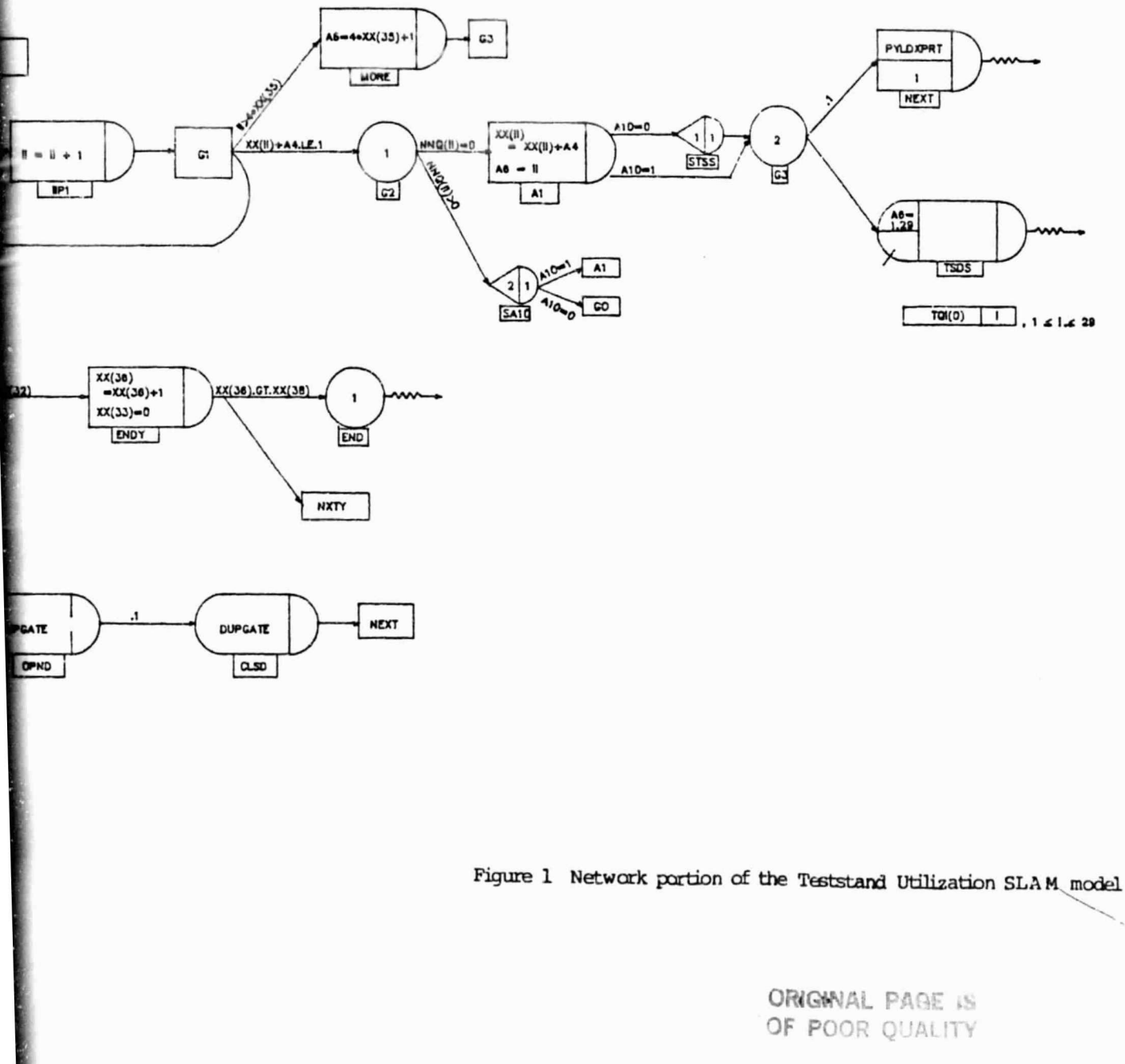


Figure 1 Network portion of the Teststand Utilization SLAM model

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below) represents one PYLDXPRT. Definitions of all important variables and files are:

II= index number associated with a TQ

XX(II)=total amount of CBEs currently assigned to TQ II,1<=II<=28

XX(31)=I,which is the rule number I,1<=I<=8,currently in effect and set by the user in INTLC(a SLAM initialization statement)

XX(32)=total number of runs desired with an XX(31) setting (set in INTLC and restricted to 1<=XX(32)<=20 in the current model)

XX(33)=total number of runs completed now (initialized to zero in INTLC)

XX(34) is not used

XX(35)=total number of teststands being modeled(set to 7, its maximum allowed value for the current model version, in INTLC)

XX(36)=current year being processed(set to XX(37) in INTLC)

XX(37)=first year in a sequence to be processed(set in INTLC)

XX(38)=last year in a sequence to be processed(set in INTLC)

File II:holds all entities associated with TQ number II, 1<=II<=28

File 29:the overflow file when XX(35)=7; holds all entities which require more than 28 TQs

File 30:holds all entities for all years under consideration; one dummy entity with A1=0,A5=1000 is included for each year to be processed and one for year XX(38)+1 (a total of XX(38)-XX(37)+2 dummy entities), and ENTRY statements are used to fill the file initially

File 31:holds all entities(including the dummy entity) for any one year's set of PYLDXPRTs at node PYLD;only one year's PYLDXPRTs is processed at a time

File 32:holds a duplicate set of all entities (including the dummy entity) for any one year's set of PYLDXPRTs for use in successive runs for a given year(see gate DUPG in Fig. 1)

SS(II)=1,2,...,8 or -1, depending upon the value of XX(31) and A7,A8,A9 (see description of subprogram SETSS below) for File II,1<=II<=28; the SS-array is set at node STSS according to the matrix in Fig. 2 below.

A10= 1,if the entity arriving at node SA10 satisfies the rule associated with the XX(31),SS(II) pair for filing into File II

A10= 0,if the entity arriving at node SA10 does not satisfy the rule already in effect at File II.

The relationships between XX(31), A7,A8,A9,A10 and SS(II) can be explained with an example using Fig. 2. If rule 1 was in effect(XX(31)=1) and the first entity entering the model had A7=A8=A9=0, then when II=1, SS(1) would be set to 1 (as Fig. 2 indicates) at node STSS, after which the entity would be filed into File 1 at node TSDS(see Fig. 1). From this moment on, only entities with A7=A8=A9=0 will be permitted into File 1, assuming of course there is room in terms of CBEs.

At nodes STSS,SA10 and PRNT, calls are made, respectively, to Fortran subroutines SETSS, SETA10 and PRTF. Fortran source code listings for these subprograms (as well as the main program and subroutine EVENT) are in App. B and a brief description of each of these subprograms follows:

SETSS:Prior to filing the initial entity into File II, SS(II) is set according to Fig. 2 using XX(31) and A7,A8,A9 for this first arrival into File II. Only entities meeting the XX(31),SS(II) requirements will be placed into File II from now on;

SETA10:If there is room(in terms of CBEs) for an entity in File II but the file is not empty, a check is made to determine if this entity's attributes satisfy the

	RULE 1			RULE 2			RULE 3			RULE 4			RULE 5			RULE 6			RULE 7			RULE 8		
SS(II)	A7	A8	A9	A7	A8	A9	A7	A8	A9	A7	A8	A9	A7	A8	A9	A7	A8	A9	A7	A8	A9	A7	A8	A9
1	0	0	0	X	0	0	0	X	0	0	0	X	X	X	0	X	0	X	0	X	X	SS(II)=-1		
2	0	0	1	X	0	1	0	X	1	0	1	X	X	X	1	X	1	X	1	X	X			
3	0	1	0	X	1	0	1	X	0	1	0	X												
4	0	1	1	X	1	1	1	X	1	1	1	X												
5	1	0	0																					
6	1	0	1																					
7	1	1	0																					
8	1	1	1																					

Figure 2 Relationships between the rule number(XX(31)) and A7,A8,A9, and SS(II) associated with File II, 1<=II<=28

restriction currently in effect at File II; A10 is then set accordingly;

PRTF:For every run of each year, statistics are maintained for a. the minimum, maximum and average number of PYLDXPRTs launched and returned(from a downflow operation), b. the minimum, maximum and average number of CBEs launched and returned, c. the minimum, maximum and average number of TQs required and d. the run number for each year which yielded the minimum and maximum for the variables in a., b. and c. Note that unless the overflow file is required, the minimim, maximum and average values associated with a. and b. will be the same for a given set of data.In addition, after each run of every year, the contents of File II, 1<=II<=29, are printed out and emptied (in preparation for the next run), appropriate XX and SS variables are set back to zero, XX(33) is incremented and, if the last run for the last year was completed, tables and plots are printed for the variables in a.,b. and c.(with years being the independent variable).

The above documentation should make the logic associated with the flow of PYLDXPRTs in the network of Fig. 1 easy to follow. Briefly, one year's worth of PYLDXPRTs at a time is placed into File 31 from File 30. For each year, a total of XX(32) runs are made with the order of the entities being different (in general) for each run. Each ordering yields (potentially) a different allocation of PYLDXPRTs among teststands, a different number of CBEs launched and returned, etcetera. NASA personnel are interested in finding the minimum number of TQs required to complete a schedule of missions. By noting the run number yielding this minimum and matching it with the file printouts for that run, an estimate for the optimal teststand utilization may be gleaned. Increasing the value of XX(32) would, of course, increase the liklihood of finding a better allocation of the teststands. Details of the output for a particular set of PYLDXPRTs from the science and applications database will be discussed in a later section.

USING THE MAINFRAME VERSUS THE PC

A predecessor to the model of Fig. 1 was executed both on an IBM 4381 mainframe and on an IBM PC with 620K RAM, two disk drives and an 8087 co-processor chip. However, to run any SLAM model containing discrete(Fortran) code on the PC requires an inventory of about six disks: 3 SLAM II disks, 2 Fortran disks(a compiler and a math package) and a separate disk for holding the SLAM files, the

executable module and output files. Also, the amount of time required to compile, link and execute using the PC version was felt to be excessive. For instance, in order to correct a single Fortran syntax error, it was not uncommon to wait five or ten minutes for the compile and relink process to be completed. The same correction might require about 30 seconds on the mainframe(of course, this might be said of any Fortran-based simulation using the PC).

It is felt that the SLAM II PC version of the TSU model is too cumbersome to use (the availability of a hard disk would help to eliminate this drawback) and, because of the long Fortran compile time, not fast enough to be considered user-friendly. Thus, the sample results presented in the next section were obtained by running the Figure 1 model on an IBM 4381 mainframe.

DISCUSSION OF INPUT AND OUTPUT

When the TSU SLAM model is executed, the output consists of the normal SLAM reports and, via subprogram PRTF, the following information:

a. for each year of data and for each run in that year, a listing of the allocation of PYLDXPRTs to each TQ in the order in which they were assigned;

b. for each year, the number of the run which resulted in the minimum and maximum number of: PYLDXPRTs launched and returned, CBEs launched and returned and TQs required; and

c. tables and plots of the minimum, maximum and average number of: PYLDXPRTs to and from the SS (based on A7), CBEs to and from the SS (based on A4) and TQs required for each year.

The TSU SLAM model was validated with deterministic data (see, for example, lines 156-175 of App. A) by manually verifying the allocation of PYLDXPRTs (and other output parameters) for the eight possible rules. Then the TSU model was run using data asociated with missions SAAX 1,4,6,7,8,11,13,16,20 and 22 of the Science and Applications database for years 1992-2001 (see lines 176-308 of App. A). A discussion of the output for this input data follows.

Appendix C shows sample output for rule number 5 (XX(31)=5) with five (XX(32)=5) runs for each year between XX(37)=1992 and XX(38)=2001. For each year and every run, the allocation of missions to TQs is shown with CBE value, A7, A8 and A9 printed for each mission. Instead of A7, A8 and A9, the notation used on output is U.1,D.0, H.1,NH.0 and P.1,NP.0 , respectively. The upper case letters represent: U=up(or launch), D=down (or downflow), H=hazardous, NH=nonhazardous, P=polar orbit and NP=nonpolar orbit. The integer (0 or 1) separated by a period from the upper case letters is the input value associated with the letter. For example, for mission 1 in 1992 the printout shows

CBE=.114 U.1,D.0 =1. H.1,NH.0=0. P.1,NP.0=0.,

which means the CBE value for this PYLDXPRT is .114, it is a launch to the SS (A7=1), it contains nonhazardous material (A8=0) and its orbit is nonpolar(A9=0).

In general, the allocation of PYLDXPRTS to TQs may be different for different runs. For instance, for runs 1,3,4 and 5 of 1993, only two TQs are required but for run 2 of 1993, three TQs are necessary. Clearly, the allocation of PYLDXPRTs associated with runs 1,3,4,5 are superior to that of run 2 based on minimizing the number of required TQs. Notice (e.g., run 5 for 1999) that since rule 5 is selected, polar and nonpolar PYLDXPRTs are segregated within TQs.

Following the printout of the allocation of PYLDXPRTs for the last run of the last year (run 5 of 1999 is the last run shown in App. C; a complete run with all runs for all years and XX(31)=7 is in App. D), a chart containing values of the ten variables below is shown for each year:

PUMINR= the run number yielding the minimum number of PYLDXPRTs launched
PUMAXR= the run number yielding the maximum number of PYLDXPRTs launched
PDMINR= the run number yielding the minimun number of PYLDXPRTs returned
PDMAXR= the run number yielding the maximum number of PYLDXPRTs returned
CUMINR= the run number yielding the minimum number of CBEs launched
CUMAXR= the run number yielding the maximum number of CBEs launched
CDMINR= the run number yielding the minimum number of CBEs returned
CDMAXR= the run number yielding the maximum number of CBEs returned
TQMINR= the run number yielding the minimum number of TQs required
TQMAXR= the run number yielding the maximum number of TQs required.

The printout for the above variables allows the analyst to determine the specific allocation of PYLDXPRTs among TQs which satisfies the criteria implied by the definition of the variable. For example, under 1993 in App. C it is shown that TQMINR=1 and TQMAXR=2. Thus, the maximum number of TQs required for 1993 is depicted in run number 2 while the minimum number of TQs required is shown in run 1 (as well as runs 3,4 and 5). As was mentioned above, unless the overflow file is needed (it was not needed here), the minimums and maximums associated with the first eight variables defined above should be the same. However, roundoff errors and ties may result in different run numbers printed for some of these eight parameters -- see, for example, App. D, year 1997, and compare CUMINR and CUMAXR.

Following the ten run numbers associated with each year, a SLAM SUMMARY REPORT is printed (this is not useful information to the analyst and will not be discussed) followed by printouts of tables and plots of the minimum, maximum and average corresponding to the ten variables above for each year(the heading RUN NUMBER 1 printed above each table and plot is automatically outputed and refers to the number of times the TSU model is executed --it has nothing to do with the run numbers discussed above). Notice again that since no overflow occurred (i.e., more than XX(35)=7 teststands was not required to process the mission data), for each year, the minimum, maximum and average values are the same, except for table and plot 5 (as expected). Each plot is a graphical representation of the same data shown in the associated table -- by changing the low and high ordinate values in the VAR statements of App. A (lines 6-24), the scaling of the plots may be improved. Appendix D shows a complete output using the same set of missions with rule number XX(31)=7 employed. Choosing a larger value for the number of runs per year, XX(32), increases both the possibility of finding a more efficient scheduling of teststands as well as model execution time.

SUMMARY AND CONCLUSIONS

The TSU SLAM II model may be used by NASA personnel to obtain an efficient (and perhaps optimal) allocation of PYLDXPRTs among teststands satisfying given usage restrictions for any set of missions. The model output may also be used to predict the number of teststands required to process a proposed set of missions. Except for changing the values of certain XX-variables (e.g., XX(31),XX(32) and XX(35) - XX(38) in lines 64-65 of App. A) and entering the input data via SLAM ENTRY

statements (e.g., lines 176-308 in App. A), little understanding of SLAM itself is necessary to run the model. Although the model can be executed using the PC version of SLAM, the mainframe version was easier to work with. As indicated by this modeling effort, simulation is a powerful analysis tool, even when random variables are not important components of the system under study.

ACKNOWLEDGEMENTS

This work was supported by the National Aeronautics and Space Administration, Kennedy Space Center, Florida, under Research Grant No. NAG10-0013.

Mr. Frank J. Sammer (formerly, an Assistant Professor of Engineering at UCF) and Ms. Nancy Lorenz (formerly, a graduate research assistant at UCF) worked closely with the principal investigator and made significant contributions during the course of this project.

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Pritsker, A. Alan B., Introduction to Simulation and SLAM II, Second Edition, John Wiley and Sons (Halsted Press), New York, 1984, 612 pp.

APPENDIX A

SLAM II statements for TSU model

```
 1  GEN,D LINTON,NASA3,05/20/85,1,,,,,,72;
 2  LIM,32,10,400;
 3  PRI/30,LVF(2)/31,LVF(5);
 4  ;
 5  RECORD(1),SS(20),YEAR OF PAYLOAD,11,B,1.,,,NO;
 6  VAR,SS(21),L,MIN # PLXP TO SS,0,100; PUMIN
 7  VAR,SS(22),H,MAX PLXP TO SS,0,100;X;PUMAX
 8  VAR,SS(23),A,AVG PLXP TO SS,0,100;X;PUAVG
 9  RECORD(2),SS(20),YEAR OF PAYLOAD,12,B,1.,,,NO;
10  VAR,SS(24),L,MIN PLXP FM SS,0,100;X; PDMIN
11  VAR,SS(25),H,MAX PLXP FM SS,0,100;X; PDMAX
12  VAR,SS(26),A,AVG PLXP FM SS,0,100;X; PDAVG
13  RECORD(3),SS(20),YEAR OF PAYLOAD,13,B,1.,,,NO;
14  VAR,SS(27),L,MIN CBE TO SS,0,100;X; CUMIN
15  VAR,SS(28),H,MAX CBE TO SS,0,100;X; CUMAX
16  VAR,SS(29),A,AVG CBE TO SS,0,100;X; CUAVG
17  RECORD(4),SS(20),YEAR OF PAYLOAD,14,B,1.,,,NO;
18  VAR,SS(30),L,MIN CBE FM SS,0,10;    CDMIN
19  VAR,SS(31),H,MAX CBE FM SS,0,10;    CDMAX
20  VAR,SS(32),A,AVG CBE FM SS,0,10;    CDAVG
21  RECORD(5),SS(20),YEAR OF PAYLOAD,15,B,1.,,,NO;
22  VAR,SS(33),L,MIN TQS NEEDED,0,10;   TQSMIN
23  VAR,SS(34),H,MAX TQS NEEDED,0,10;   TQSMAX
24  VAR,SS(35),A,AVG TQS NEEDED,0,10;   TQSAVG
25  ;
26  ;1 ENTITY=1 PAYLOAD TRANSPORT
27  ;II=INDEX ASSOCIATED WITH ANY TESTSTAND QUARTER(TQ)
28  ;FILE II=HOLDS ALL ENTITIES ASSOC. WITH ONE TQ,1<=II<=28
29  ;FILE 29=OVERFLOW IF XX(35)= 7
30  ;FILE 30=ALL ENTITIES FOR ALL YEARS AT NODE ALLP
31  ;FILE 31=INPUT FILE FOR PAYLOAD TRANSPORTS AT NODE PYLD
32  ;FILE 32=DUPLICATED INPUT FILE, A GATE
33  ;
34  ;XX(II)=TOTAL AMOUNT OF CBE CURRENTLY IN TQ II,1<=II<=28
35  ;XX(31)=I, IF RULE NO. I,1<=1<=8,SET BY USER IN INTLC,IS IN EFFECT
36  ;XX(32)=TOTAL NO. OF RUNS DESIRED,SET BY USER IN INTLC
37  ;XX(33)=CURRENT NUMBER OF RUNS COMPLETED NOW(XX(33)=0 IN INTLC)
38  ;XX(34)=TOTAL NO. ENTITIES IN FILE 30(NOT COUNTING A1=0 ENTITIES)
39  ;XX(35)=TOTAL NO. OF TESTSTANDS BEING MODELED(1<=XX(35)<=7)
40  ;XX(36)=CURRENT YEAR BEING PROCESSED(SET TO XX(37) IN INTLC)
41  ;XX(37)=FIRST YEAR IN THE SEQUENCE
42  ;XX(38)=LAST YEAR IN SEQUENCE
43  ;ATRIB(1)=MISSION #(A1=0,A5=1000 FOR LAST ENTITY)
44  ;     (2)=YEAR OF PAYLOAD
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```
45  ;      (3)=NOT USED
46  ;      (4)=CBE VALUE
47  ;      (5)=RANDOM NO. FOR SHUFFLING INPUT DATA FOR SUCCESSIVE RUNS
48  ;      (6)=FILE NUMBER FOR FILING ENTITIES INTO APPROPRIATE TQ
49  ;      (7)=0,DOWNFLOW;1,LAUNCH
50  ;      (8)=0,NONHAZARDOUS;1,HAZARDOUS
51  ;      (9)=0,LOW INCLINATION ORBIT;1,POLAR ORBIT
52  ;     (10)=1,IF ENTITY AT NODE SA10 SATISFIES RULE ASSOCIATED
53  ;            WITH XX(31),SS(II), FOR FILING AT II
54  ;          =0,IF ENTITY DOES NOT SATISFY RULE FOR FILE II AT NODE SA10
55  ;SS(II)=1,2,...,8, DEPENDING UPON VALUE OF XX(31) AND ATRIBS 7,8,9
56  ;        FOR FILE II (SET AT NODE STSS)
57  ;
58  ;RULE 1 = SEGREGATE ON A7,A8,A9     RULE 5=SEGREGATE ON A9 ONLY
59  ;RULE 2 =           ON    A8,A9     RULE 6=           ON A8 ONLY
60  ;RULE 3 =           ON A7,   A9     RULE 7=           ON A7 ONLY
61  ;RULE 4 =           ON A7,A8        RULE 8=  NO SEGREGATION
62  ;
63  ;
64  INTLC,XX(31)=5,XX(32)=5,XX(33)=0,XX(34)=8,XX(35)=7;
65  INTLC,XX(36)=1992,XX(37)=1992,XX(38)=2001;
66  NETWORK;
67          RES/PYLDXPRT(0),31; FOR PAYLOAD XPRTS FOR YEAR IN PROCESS
68          RES/ALLPYLDS(1),30; FOR ALL PYLD XPRTS FOR ALL YEARS
69          GAT/DUPGATE,CLOSED,32;
70          RES/TQ1(0),1;
71          RES/TQ2(0),2;
72          RES/TQ3(0),3;
73          RES/TQ4(0),4;
74          RES/TQ5(0),5;
75          RES/TQ6(0),6;
76          RES/TQ7(0),7;
77          RES/TQ8(0),8;
78          RES/TQ9(0),9;
79          RES/TQ10(0),10;
80          RES/TQ11(0),11;
81          RES/TQ12(0),12;
82          RES/TQ13(0),13;
83          RES/TQ14(0),14;
84          RES/TQ15(0),15;
85          RES/TQ16(0),16;
86          RES/TQ17(0),17;
87          RES/TQ18(0),18;
88          RES/TQ19(0),19;
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 89           RES/TQ20(0),20;
 90           RES/TQ21(0),21;
 91           RES/TQ22(0),22;
 92           RES/TQ23(0),23;
 93           RES/TQ24(0),24;
 94           RES/TQ25(0),25;
 95           RES/TQ26(0),26;
 96           RES/TQ27(0),27;
 97           RES/TQ28(0),28;
 98           RES/MORETSDS(0),29;
 99  ALLP     AWAIT(30),ALLPYLDS/1,2; M=2
100            ACT,,XX(36).GE.ATRIB(2),PYLD;
101            ACT,,XX(36).GE.ATRIB(2),NXTY;
102            ACT,,,ALLP;
103            ACT,.01,,NEXT;
104  NXTY     FREE,ALLPYLDS/1;
105  T1       TERM;
106  ;
107  PYLD     AWAIT(31),PYLDXPRT/1,2; M=2
108            ACT,,ATRIB(1).EQ.0.,DUPG;LAST ENTITY 4 ALL RUNS HAS A1,A5 SET
109            ACT,,ATRIB(1).GT.0,II0;
110            ACT,,ATRIB(1).EQ.0,PRNT;
111            ACT,,,ARAN;
112  ARAN     ASS,ATRIB(5)=DRAND;
113  DUPG     AWAIT(32),DUPGATE;
114            ACT,,,PYLD;
115  PRNT     EVENT,3,1;JEVNT=3,PRINT OUT FILES,XX(33)=XX(33)+1
116            ACT,,XX(33).GE.XX(32),ENDY;
117           ACT,.01,,OPND;DELAY OPENING SO ZERO TIME ACTIVS COMPLETED
118  OPND     OPEN,DUPGATE;
119            ACT,.01;
120           CLOSE,DUPGATE;
121            ACT,.01,,NEXT;
122  ENDY     ASS,XX(36)=XX(36)+1,XX(33)=0.1;
123            ACT,,XX(36).GT.XX(38),END;IF DONE,TERMINATE
124            ACT,,,NXTY;DO NEXT YEARS ENTITIES
125  END      TERM,1; END LAST RUN OF LAST YEAR
126  II0      ASS,II=0;
127  G0       GOON;
128  IIP1     ASS,II=II+1,1;
129  G1       GOON,1; M=1
130            ACT,,II.GT.4*XX(35),MORE; XX(35)=NO. TESTSTANDS MODELED
131            ACT,,XX(II)+ATRIB(4).LE.1.,G2;
132            ACT,,,G0;
```

```
MORE    ASS,ATRIB(6)=4*XX(35)+1;
         ACT,,,G3;
G2      GOON,1;
         ACT,,NNQ(II).GT.0,SA10;
         ACT,,NNQ(II).EQ.0,A1;
SA10    EVENT,2,1; JEVNT=2, SET ATRIB(10)
         ACT,,ATRIB(10).EQ.1,A1; ENTITY MATCHES RULE FOR II
         ACT,,ATRIB(10).EQ.0,G0; ENTITY DOESNT MATCH RULE AT FILE II
A1      ASS,XX(II)=XX(II)+ATRIB(4),ATRIB(6)=II,1;
          ACT,,ATRIB(10).EQ.0,STSS;
          ACT,,ATRIB(10).EQ.1,G3;
STSS    EVENT,1,1; JEVNT=1,SET SS(II) BASED ON XX(31) RULE NUMBER
         ACT,,,G3;
G3      GOON,2;
          ACT,.01,,NEXT;
          ACT,,,TSDS;
NEXT    FREE,PYLDXPRT/1,1;
        TERM;
TSDS    AWAIT(ATRIB(6)=1,29),ATRIB(6)/1;
        TERM;
        ENDNETWORK;
INIT,0.,20.;
;ONTR,TRACE,1.5,3.,2,5,-33,-36,-37,-38;
;NT/30,1,1993,0,.24,1,0,0,0,0; A7=A8=A9=0
;NT/30,2,1993,0,.24,5,0,0,0,1; A7=A8=0,A9=1
;NT/30,3,1993,0,.60,3,0,0,1,0; A7=A9=0,A8=1
;NT/30,4,1993,0,.36,2,0,1,0,0; A7=1,A8=A9=0
;NT/30,5,1993,0,.50,4,0,0,1,1; A7=0,A8=A9=1
;NT/30,6,1993,0,.50,6,0,1,0,1; A7=A9=1,A8=0
;NT/30,7,1993,0,.24,7,0,1,1,0; A7=A8=1,A9=0
;NT/30,8,1993,0,.18,8,0,1,1,1; A7=A8=A9=1
;NT/30,0,1993,0,0,1000.; LAST ENTRY IN FILE 30
;NT/30,1,1994,0,.72,1,0,0,0,0;1ST ENTRY OF 1994
;NT/30,2,1994,0,.52,2,0,0,0,1;
;NT/30,3,1994,0,.52,3,0,0,1,0;
;NT/30,4,1994,0,.47,4,0,1,0,0;
;NT/30,5,1994,0,.47,5,0,0,1,1;
;NT/30,6,1994,0,.27,6,0,1,0,1;
;NT/30,7,1994,0,.27,7,0,1,1,0;
;NT/30,8,1994,0,.27,8,0,1,1,1;
;NT/30,9,1994,0,.27,9,0,1,1,1;
;NT/30,0,1994,0,0,1000; LAST 1994 ENTRY
;NT/30,0,1995,0,0,1000;ONLY 1995 ENTRY
; NASA DATA MAY 1985, FOR YEARS 1992 TO 2001
```

```
177  ENT/30,0,1992,0,0,1000; DUMMY ENTRIES FOR FOR1 1992 TO 2002
178  ENT/30,0,1993,0,0,1000;
179  ENT/30,0,1994,0,0,1000;
180  ENT/30,0,1995,0,0,1000;
181  ENT/30,0,1996,0,0,1000;
182  ENT/30,0,1997,0,0,1000;
183  ENT/30,0,1998,0,0,1000;
184  ENT/30,0,1999,0,0,1000;
185  ENT/30,0,2000,0,0,1000;
186  ENT/30,0,2001,0,0,1000;
187  ENT/30,0,2002,0,0,1000; LAST DUMMY ENTRY FOR LAST YEAR + (1)
188  ; BEGINNING OF ACTUAL DATA FOR  1992  TO  2001
189  ENT/30,1,1992,0,.114,0,0,1,0,0; ASSUME A5=DRAND # =0 FOR INITIAL DATA
190  ENT/30,1,1994,0,.114,0,0,0,0,0;
191  ENT/30,4,1993,0,.148,0,0,1,0,0;
192  ENT/30,4,1995,0,.194,0,0,1,0,0;
193  ENT/30,4,1995,0,.074,0,0,0,0,0;
194  ENT/30,4,1997,0,.194,0,0,1,0,0;
195  ENT/30,4,1997,0,.074,0,0,0,0,0;
196  ENT/30,4,1999,0,.194,0,0,1,0,0;
197  ENT/30,4,1999,0,.074,0,0,0,0,0;
198  ENT/30,4,2001,0,.194,0,0,1,0,0;
199  ENT/30,4,2001,0,.074,0,0,0,0,0;
200  ENT/30,6,1995,0,.119,0,0,1,0,0;
201  ENT/30,6,1998,0,.0185,0,0,1,0,0;
202  ENT/30,6,1998,0,.0185,0,0,0,0,0;
203  ENT/30,6,2000,0,.119,0,0,0,0,0;
204  ENT/30,7,1995,0,.185,0,0,1,0,0;
205  ENT/30,7,1998,0,.004,0,0,1,0,0;
206  ENT/30,7,1998,0,.004,0,0,0,0,0;
207  ENT/30,7,2000,0,.185,0,0,0,0,0;
208  ENT/30,8,1995,0,.111,0,0,1,0,1; POLAR FOR MISSION 8
209  ENT/30,8,1996,0,.006,0,0,1,0,1;
210  ENT/30,8,1996,0,.006,0,0,0,0,1;
211  ENT/30,8,1997,0,.006,0,0,1,0,1;
212  ENT/30,8,1997,0,.006,0,0,0,0,1;
213  ENT/30,8,1998,0,.006,0,0,1,0,1;
214  ENT/30,8,1998,0,.006,0,0,0,0,1;
215  ENT/30,8,1999,0,.006,0,0,1,0,1;
216  ENT/30,8,1999,0,.006,0,0,0,0,1;
217  ENT/30,8,2000,0,.006,0,0,1,0,1;
218  ENT/30,8,2000,0,.006,0,0,0,0,1;
219  ENT/30,8,2001,0,.006,0,0,1,0,1;
220  ENT/30,8,2001,0,.006,0,0,0,0,1;
```

```
221  ;
222  ;
223  ;FROM MISSION 11 (2ND PAGE OF DATA)
224  ENT/30,11,1993,0,.463,0,0,1,0,0;
225  ENT/30,11,1996,0,.056,0,0,1,0,0;
226  ENT/30,11,1999,0,.056,0,0,1,0,0;
227  ENT/30,13,1993,0,.581,0,0,0,0,0;
228  ENT/30,16,1994,0,.111,0,0,1,0,0;
229  ENT/30,16,1994,0,.111,0,0,0,0,0;
230  ENT/30,16,1997,0,.111,0,0,1,0,0;
231  ENT/30,16,1997,0,.111,0,0,0,0,0;
232  ENT/30,16,2000,0,.111,0,0,1,0,0;
233  ENT/30,16,2000,0,.111,0,0,0,0,0;
234  ENT/30,20,1997,0,1.,0,0,1,0,0;  CBE=1
235  ENT/30,20,1997,0,1.,0,0,1,0,0;  CBE=1
236  ENT/30,20,1999,0,.074,0,0,1,0,0;
237  ENT/30,20,1999,0,.004,0,0,0,0,0;
238  ;
239  ENT/30,20,2001,0,.074,0,0,1,0,0;
240  ENT/30,20,2001,0,.004,0,0,0,0,0;
241  ENT/30,22,1992,0,.167,0,0,1,0,0;
242  ENT/30,22,1993,0,.085,0,0,1,0,0;
243  ENT/30,22,1993,0,.085,0,0,1,0,0;
244  ENT/30,22,1993,0,.085,0,0,1,0,0;
245  ENT/30,22,1993,0,.085,0,0,1,0,0;
246  ENT/30,22,1993,0,.084,0,0,0,0,0;
247  ENT/30,22,1993,0,.084,0,0,0,0,0;
248  ENT/30,22,1993,0,.084,0,0,0,0,0;
249  ENT/30,22,1993,0,.084,0,0,0,0,0;
250  ENT/30,22,1994,0,.085,0,0,1,0,0;
251  ENT/30,22,1994,0,.085,0,0,1,0,0;
252  ENT/30,22,1994,0,.085,0,0,1,0,0;
253  ENT/30,22,1994,0,.085,0,0,1,0,0;
254  ENT/30,22,1994,0,.084,0,0,0,0,0;
255  ENT/30,22,1994,0,.084,0,0,0,0,0;
256  ENT/30,22,1994,0,.084,0,0,0,0,0;
257  ENT/30,22,1994,0,.084,0,0,0,0,0;
258  ENT/30,22,1995,0,.085,0,0,1,0,0;
259  ENT/30,22,1995,0,.085,0,0,1,0,0;
260  ENT/30,22,1995,0,.085,0,0,1,0,0;
261  ENT/30,22,1995,0,.085,0,0,1,0,0;
262  ENT/30,22,1995,0,.084,0,0,0,0,0;
263  ENT/30,22,1995,0,.084,0,0,0,0,0;
264  ENT/30,22,1995,0,.084,0,0,0,0,0;
```

```
265   ENT/30,22,1995,0,.084,0,0,0,0,0;
266   ENT/30,22,1996,0,.085,0,0,1,0,0;
267   ENT/30,22,1996,0,.085,0,0,1,0,0;
268   ENT/30,22,1996,0,.085,0,0,1,0,0;
269   ENT/30,22,1996,0,.085,0,0,1,0,0;
270   ENT/30,22,1996,0,.084,0,0,0,0,0;
271   ENT/30,22,1996,0,.084,0,0,0,0,0;
272   ENT/30,22,1996,0,.084,0,0,0,0,0;
273   ENT/30,22,1996,0,.084,0,0,0,0,0;
274   ENT/30,22,1997,0,.085,0,0,1,0,0;
275   ENT/30,22,1997,0,.085,0,0,1,0,0;
276   ENT/30,22,1997,0,.085,0,0,1,0,0;
277   ENT/30,22,1997,0,.085,0,0,1,0,0;
278   ENT/30,22,1997,0,.084,0,0,0,0,0;
279   ENT/30,22,1997,0,.084,0,0,0,0,0;
280   ENT/30,22,1997,0,.084,0,0,0,0,0;
281   ENT/30,22,1997,0,.084,0,0,0,0,0;
282   ENT/30,22,1998,0,.085,0,0,1,0,0;
283   ENT/30,22,1998,0,.085,0,0,1,0,0;
284   ENT/30,22,1998,0,.085,0,0,1,0,0;
285   ENT/30,22,1998,0,.085,0,0,1,0,0;
286   ENT/30,22,1998,0,.084,0,0,0,0,0;
287   ENT/30,22,1998,0,.084,0,0,0,0,0;
288   ENT/30,22,1998,0,.084,0,0,0,0,0;
289   ENT/30,22,1998,0,.084,0,0,0,0,0;
290   ENT/30,22,1999,0,.085,0,0,1,0,0;
291   ENT/30,22,1999,0,.085,0,0,1,0,0;
292   ENT/30,22,1999,0,.085,0,0,1,0,0;
293   ENT/30,22,1999,0,.085,0,0,1,0,0;
294   ENT/30,22,1999,0,.084,0,0,0,0,0;
295   ENT/30,22,1999,0,.084,0,0,0,0,0;
296   ENT/30,22,1999,0,.084,0,0,0,0,0;
297   ENT/30,22,1999,0,.084,0,0,0,0,0;
298   ENT/30,22,2000,0,.085,0,0,1,0,0;
299   ENT/30,22,2000,0,.085,0,0,1,0,0;
300   ENT/30,22,2000,0,.085,0,0,1,0,0;
301   ENT/30,22,2000,0,.085,0,0,1,0,0;
302   ENT/30,22,2000,0,.084,0,0,0,0,0;
303   ENT/30,22,2000,0,.084,0,0,0,0,0;
304   ENT/30,22,2000,0,.084,0,0,0,0,0;
305   ENT/30,22,2000,0,.084,0,0,0,0,0;
306   ENT/30,22,2001,0,.085,0,0,1,0,0;
307   ENT/30,22,2001,0,.085,0,0,1,0,0;
308   ENT/30,22,2001,0,.085,0,0,1,0,0;
```

```
309   ENT/30,22,2001,0,.085,0,0,1,0,0;
310   ENT/30,22,2001,0,.084,0,0,0,0,0;
311   ENT/30,22,2001,0,.084,0,0,0,0,0;
312   ENT/30,22,2001,0,.084,0,0,0,0,0;
313   ENT/30,22,2001,0,.084,0,0,0,0,0;
314   ; END OF DATA FOR MISSIONS SAAX 1,4,6,7,8,11,13,16,20,22
315   ; SOME MISSIONS WERE SKIPPED DUE TO UNCLEAR, INCORRECT OR INSUFF. DATA
316   FIN;
```

S L A M E C H O R E P O R T

SIMULATION PROJECT NASA3 BY D LINTON

DATE 5/20/1985 RUN NUMBER 1 OF 1

SLAM VERSION JUN 84

GENERAL OPTIONS

APPENDIX B

Fortran source code listings for
MAIN, EVENT, SETSS, SETA10 and PRTF

```
      DIMENSION NSET(100000)

     COMMON/SCOM1/ ATRIB(100),DD(100),DDL(100),DTNOW,II,MFA,MSTOP,NCLNR
    1,NCRDR,NPRNT,NNRUN,NNSET,NTAPE,SS(100),SSL(100),TNEXT,TNOW,XX(100)
 MAIN PROGRAM FOR NASA3

      COMMON QSET(100000)
      EQUIVALENCE(NSET(1),QSET(1))
      NNSET=100000
      NCRDR=5
      NPRNT=6
      NTAPE=7
      CALL SLAM
      STOP
      END
 * * END OF FILE * * *




      SUBROUTINE EVENT(I)

FOR NASA2

      GOTO(1,2,3),I
      CALL SETSS
      RETURN
      CALL SETA10
      RETURN
      CALL PRTF
      RETURN
      END
 * * END OF FILE * * *
```

```
      SUBROUTINE SETSS

     COMMON/SCOM1/ ATRIB(100),DD(100),DDL(100),DTNOW,II,MFA,MSTOP,NCLNR
    1,NCRDR,NPRNT,NNRUN,NNSET,NTAPE,SS(100),SSL(100),TNEXT,TNOW,XX(100)
CALLED AT NODE STSS IN NASA2

XX(31)=RULE # SET BY USER IN INTLC

      I7=ATRIB(7)
      I8=ATRIB(8)
      I9=ATRIB(9)
      KEY=XX(31)
      L=1
      GOTO(1,2,3,4,5,6,7,8),KEY
RULE1, SEGREGATE ON A7,A8,A9
      CONTINUE
      DO11I=1,2
      IM1=I-1
      DO12J=1,2
      JM1=J-1
      DO13K=1,2
      KM1=K-1
      IF(I7.EQ.IM1.AND.I8.EQ.JM1.AND.I9.EQ.KM1)GOTO1000
         L=L+1
      CONTINUE
      CONTINUE
      CONTINUE
      GOTO99
RULE 2 ,SEGR ON A8,A9
      CONTINUE
      DO21I=1,2
      IM1=I-1
      DO22J=1,2
      JM1=J-1
      IF(I8.EQ.IM1 .AND. I9.EQ.JM1) GOTO1000
             L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 3, SEGR ON A7,A9
      CONTINUE
      DO31I=1,2
      IM1=I-1
      DO32J=1,2
```

```
      JM1=J-1
      IF(I7.EQ.IM1 .AND. I9.EQ.JM1) GOTO1000
           L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 4, SEGR A7,A8
      CONTINUE
      DO41I=1,2
       IM1=I-1
      DO42J=1,2
       JM1=J-1
      IF(I7.EQ.IM1 .AND. I8.EQ.JM1) GOTO1000
           L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 5, A9
      CONTINUE
      IF(I9.EQ.0) SS(II)=1
      IF(I9.EQ.1)SS(II)=2
      IF(I9 .NE. 0 .AND. I9.NE.1) GOTO99
      RETURN
RULE 6, A8
      CONTINUE
      IF(I8.EQ.0) SS(II)=1
      IF(I8.EQ.1)SS(II)=2
      IF(I8.NE.0 .AND. I8.NE.1)GOTO99
      RETURN
RULE 7, A7
      CONTINUE
      IF(I7.EQ.0) SS(II)=1
      IF(I7.EQ.1) SS(II)=2
      IF(I7.NE.0 .AND. I7.NE.1) GOTO99
      RETURN
RULE 8,NO SEGREGATION; SET SS(II)=-1
      CONTINUE
      SS(II)=-1
      RETURN
      WRITE(NPRNT,900)KEY
0     FORMAT(1X,' ****** ERROR IN SETSS ******    KEY= ',I3)
      RETURN

00    SS(II)=L

      RETURN

      END
 * * END OF FILE * * *
```

```
      SUBROUTINE SETA10

     COMMON/SCOM1/ ATRIB(100),DD(100),DDL(100),DTNOW,II,MFA,MSTOP,NCLNR
    1,NCRDR,NPRNT,NNRUN,NNSET,NTAPE,SS(100),SSL(100),TNEXT,TNOW,XX(100)
CALLED AT NODE SA10 IN NASA2

SS(II) RULE1 RULE2 RULE3 RULE4 RULE5 RULE6 RULE7 RULE8
 1     000   X00   0X0   00X   XX0   X0X   0XX   SS=-1
 2     001   X01   0X1   01X   XX1   X1X   1XX
 3     010   X10   1X0   10X
 4     011   X11   1X1   11X
 5     100
 6     101
 7     110
 8     111



XX(31)=RULE # SET BY USER IN INTLC


      I7=ATRIB(7)
      I8=ATRIB(8)
      I9=ATRIB(9)
      KEY=XX(31)
      KEY1=SS(II)
      L=1
      GOTO(1,2,3,4,5,6,7,8),KEY
RULE1, SEGREGATE ON A7,A8,A9
      CONTINUE
      DO11I=1,2
      IM1=I-1
      DO12J=1,2
      JM1=J-1
      DO13K=1,2
      KM1=K-1
      IF(I7.EQ.IM1.AND.I8.EQ.JM1.AND.I9.EQ.KM1 .AND.KEY1.EQ.L)GOTO1000
                L=L+1
      CONTINUE
      CONTINUE
      CONTINUE
```

```
      GOTO99
RULE 2 ,SEGR ON A8,A9
      CONTINUE
      DO21I=1,2
      IM1=I-1
      DO22J=1,2
      JM1=J-1
      IF(I8.EQ.IM1 .AND. I9.EQ.JM1 .AND. KEY1.EQ.L)GOTO1000
              L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 3, SEGR ON A7,A9
      CONTINUE
      DO31I=1,2
      IM1=I-1
      DO32J=1,2
      JM1=J-1
      IF(I7.EQ.IM1 .AND. I9.EQ.JM1 .AND. KEY1.EQ.L)GOTO1000
            L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 4, SEGR A7,A8
      CONTINUE
      DO41I=1,2
       IM1=I-1
      DO42J=1,2
       JM1=J-1
      IF(I7.EQ.IM1 .AND. I8.EQ.JM1 .AND. KEY1.EQ.L)GOTO1000
              L=L+1
      CONTINUE
      CONTINUE
      GOTO99
RULE 5, A9
      CONTINUE
      IF(I9.EQ.0 .AND. KEY1.EQ.1 .OR. I9.EQ.1 .AND. KEY1.EQ.2)
     1 ATRIB(10)=1
      IF(I9 .NE. 0 .AND. I9.NE.1) GOTO99
      RETURN
RULE 6, A8
      CONTINUE
      IF(I8.EQ.0 .AND. KEY1.EQ.1 .OR. I8.EQ.1 .AND. KEY1.EQ.2)
     1 ATRIB(10)=1
```

```
      IF(I8.NE.0 .AND. I8.NE.1)GOTO99
      RETURN
RULE 7, A7
      CONTINUE
      IF(I7.EQ.0 .AND. KEY1.EQ.1 .OR. I7.EQ.1 .AND. KEY1.EQ.2)
     1 ATRIB(10)=1
      IF(I7.NE.0 .AND. I7.NE.1) GOTO99
      RETURN
RULE 8,NO SEGREGATION; SET ATRIB(10)=1
      CONTINUE
      ATRIB(10)=1
      RETURN
      ATRIB(10)=0
      WRITE(NPRNT,900)KEY,KEY1,II
0     FORMAT(1X,' ****** IN SETA10 ****  KEY,SS(II),II= ',  3I4)
      RETURN

00    ATRIB(10)=1
      RETURN
      END
 * * END OF FILE * * *
```

```
      SUBROUTINE PRTF

     COMMON/SCOM1/ ATRIB(100),DD(100),DDL(100),DTNOW,II,MFA,MSTOP,NCLNR
    1,NCRDR,NPRNT,NNRUN,NNSET,NTAPE,SS(100),SSL(100),TNEXT,TNOW,XX(100)
FOR NASA3

      DIMENSION PLUP(20,20),PLDN(20,20),CBUP(20,20),CBDN(20,20),
    1TQS(20,20),PUMIN(20),PUMAX(20),PUAVG(20),CUMIN(20),CUMAX(20)
    2,CUAVG(20),TQSMIN(20),TQSMAX(20),TQSAVG(20),PDMIN(20),PDMAX(20),
    3PDAVG(20),CDMIN(20),CDMAX(20),CDAVG(20)

      DIMENSIONPUMINR(20),CUMINR(20),PDMINR(20),CDMINR(20),TQMINR(20),
    1          PUMAXR(20),CUMAXR(20),PDMAXR(20),CDMAXR(20),TQMAXR(20)
      DATA PUMIN,CUMIN,PDMIN,CDMIN,TQSMIN/100*1000./
      DATA PUMAX,CUMAX,PDMAX,CDMAX,TQSMAX/100*-1./

      DIMENSION A(100)
      IFIL=4*XX(35) + 1
      ITSDS=XX(35)
      IRULE=XX(31)
      IRUN=XX(33)+1
      ITOTR=XX(32)
      IYR=XX(36)-XX(37)+1
      WRITE(NPRNT,1001)XX(36)
      WRITE(NPRNT,10)IRULE,ITSDS,IRUN,ITOTR
01    FORMAT(/,1X,' FOR YEAR ',F5.0,20('*') )
      FORMAT(/,1X,' USING RULE NO.',I2,1X,'WITH',I2,' TESTSTANDS,THIS
    1 IS RUN',I2,' OF',I2)
IFIL = TOTAL NO. OF FILES, INCLUDING OVERFLOW FILE
      DO 1 I=1,IFIL
      J=NNQ(I)
      IF(J.EQ.0)GOTO1
      IF(I.EQ.IFIL)GOTO80
      WRITE(NPRNT,4) I
      FORMAT( /,2X,' FOR TESTSTAND-QUARTER NO. ',I3)
      GOTO81
      WRITE(NPRNT,44)
      FORMAT(/,2X,' FOR OVERFLOW PAYLOAD TRANSPORTS')
      SUM=0
      DO2 K=1,J
      CALL RMOVE(1,I,A)
BY CALLING RMOVE & NOT FILEM AFTER, ALL IFIL FILES ARE EMPTIED
      I7=A(7)
      IF(I7.EQ.0)GOTO100
```

```
A(7)=1, UP FROM GRND TO SPACE STATION
     PLUP(IYR,IRUN)=PLUP(IYR,IRUN) + 1
     CBUP(IYR,IRUN)=CBUP(IYR,IRUN)+A(4)
     GOTO 85
00   A(7)=0, DOWN FRM SS TO GRND
0    PLDN(IYR,IRUN)=PLDN(IYR,IRUN)+1
     CBDN(IYR,IRUN)=CBDN(IYR,IRUN)+A(4)
     CONTINUE

     WRITE(NPRNT,5) K
     WRITE(NPRNT,6)A(1),A(4),(A(L),L=7,9)
     SUM=SUM + A(4)
     FORMAT(/ ,5X,' FOR ENTRY NO. ',I3)
     FORMAT(   6X,' MISSION  = ',F3.0,1X,'CBE= ',F6.3,1X,' U.1,D.0 ='
    1 ,F3.0,1X,'H.1,NH.0 =',F3.0,1X,' P.1,NP.0 =',F3.0)
     FORMAT(    1X,' TOTAL CBE VALUE FOR FILE ',I2,' = ',F7.3,/  )
     CONTINUE
     TQS(IYR,IRUN)=I
     WRITE(NPRNT,7)I,SUM
     CONTINUE

     IF(PUMIN(IYR).GT.PLUP(IYR,IRUN))GOTO3001
00   IF(PUMAX(IYR).LT.PLUP(IYR,IRUN))GOTO3003
02   IF(CUMIN(IYR).GT.CBUP(IYR,IRUN))GOTO3005
04   IF(CUMAX(IYR).LT.CBUP(IYR,IRUN))GOTO3007
06   IF(PDMIN(IYR).GT.PLDN(IYR,IRUN))GOTO3009
08   IF(PDMAX(IYR).LT.PLDN(IYR,IRUN))GOTO3011
10   IF(CDMIN(IYR).GT.CBDN(IYR,IRUN))GOTO3013
12   IF(CDMAX(IYR).LT.CBDN(IYR,IRUN))GOTO3015
14   IF(TQSMIN(IYR).GT.TQS(IYR,IRUN))GOTO3017
16   IF(TQSMAX(IYR).LT.TQS(IYR,IRUN))GOTO3019
     GOTO4000
01   PUMIN(IYR)=PLUP(IYR,IRUN)
     PUMINR(IYR)=IRUN
     GOTO3000
03   PUMAX(IYR)=PLUP(IYR,IRUN)
     PUMAXR(IYR)=IRUN
     GOTO3002
05   CUMIN(IYR)=CBUP(IYR,IRUN)
     CUMINR(IYR)=IRUN
     GOTO3004
07   CUMAX(IYR)=CBUP(IYR,IRUN)
     CUMAXR(IYR)=IRUN
     GOTO3006
```

```
09    PDMIN(IYR)=PLDN(IYR,IRUN)
      PDMINR(IYR)=IRUN
      GOTO3008
11    PDMAX(IYR)=PLDN(IYR,IRUN)
      PDMAXR(IYR)=IRUN
      GOTO3010
13    CDMIN(IYR)=CBDN(IYR,IRUN)
      CDMINR(IYR)=IRUN
      GOTO3012
15    CDMAX(IYR)=CBDN(IYR,IRUN)
      CDMAXR(IYR)=IRUN
      GOTO3014
17    TQSMIN(IYR)=TQS(IYR,IRUN)
      TQMINR(IYR)=IRUN
      GOTO3016
19    TQSMAX(IYR)=TQS(IYR,IRUN)
      TQMAXR(IYR)=IRUN
00    CONTINUE
      XX(33)=XX(33) + 1
AFTER INCREMENTATION, XX(33)= TOTAL # RUNS COMPLETED AT TNOW
ASSUMING XX(33) SET TO 0 IN INTLC
      IF(XX(33).LT. XX(32))GOTO500
HERE, XX(33).GE. XX(32) SO EMPTY DUPGATE(FILE 32)
      I=NNQ(32)
      DO 499 J=1,I
9     CALL RMOVE(1,32,A)
0     CONTINUE
      DO60 I=1,IFIL
      XX(I)=0.
      SS(I)=0.
      CONTINUE
BEFORE RETURN, SET APPROPRIATE XX AND SS VARS=0;THEN NEXT RUN
      IF(XX(36) .GE. XX(38) .AND. XX(33).GE.XX(32))GOTO200
      RETURN

00
0     CONTINUE
      NYRS=XX(38)-XX(37)+1

      DO800 I=1,NYRS
      YEAR=XX(37)+I-1
      WRITE(NPRNT,801)YEAR
1     FORMAT(5X,' TO FIND BEST RUN NO. FOR YEAR ',F6.0,25('-') )
      WRITE(NPRNT,803)
```

```
3     FORMAT(/,10X,'PUMINR',2X,'PDMINR',2X,'CUMINR',2X,'CDMINR',2X,
     1            'TQMINR')
      WRITE(NPRNT,802)PUMINR(I),PDMINR(I),CUMINR(I),CDMINR(I),TQMINR(I)
2     FORMAT(10X,5(F6.0,2X))
      WRITE(NPRNT,804)
4     FORMAT(/,10X,'PUMAXR',2X,'PDMAXR',2X,'CUMAXR',2X,'CDMAXR',2X,
     1       'TQMAXR')
      WRITE(NPRNT,802)PUMAXR(I),PDMAXR(I),CUMAXR(I),CDMAXR(I),TQMAXR(I)
0     CONTINUE
      DO300I=1,NYRS
      PUAVG(I)=0
      PDAVG(I)=0
      CUAVG(I)=0
      CDAVG(I)=0
      TQSAVG(I)=0
      DO301J=1,ITOTR
      PUAVG(I)=PUAVG(I)+PLUP(I,J)
      PDAVG(I)=PDAVG(I)+PLDN(I,J)
      CUAVG(I)=CUAVG(I)+CBUP(I,J)
      CDAVG(I)=CDAVG(I)+CBDN(I,J)
      TQSAVG(I)=TQSAVG(I)+TQS(I,J)
1     CONTINUE
      PUAVG(I)=PUAVG(I)/XX(32)
      PDAVG(I)=PDAVG(I)/XX(32)
      CUAVG(I)=CUAVG(I)/XX(32)
      CDAVG(I)=CDAVG(I)/XX(32)
      TQSAVG(I)=TQSAVG(I)/XX(32)
0     CONTINUE

 PLOTTING FOLLOWS

      DO400I=1,NYRS
      SS(20)=XX(37)+I-1
      SS(21)=PUMIN(I)
      SS(22)=PUMAX(I)
      SS(23)=PUAVG(I)
      CALL GPLOT(1)
      SS(24)=PDMIN(I)
      SS(25)=PDMAX(I)
      SS(26)=PDAVG(I)
      CALL GPLOT(2)
      SS(27)=CUMIN(I)
      SS(28)=CUMAX(I)
      SS(29)=CUAVG(I)
```

```
      CALL GPLOT(3)
      SS(30)=CDMIN(I)
      SS(31)=CDMAX(I)
      SS(32)=CDAVG(I)
      CALL GPLOT(4)
      SS(33)=TQSMIN(I)
      SS(34)=TQSMAX(I)
      SS(35)=TQSAVG(I)
      CALL GPLOT(5)
0     CONTINUE


      RETURN
      END
 * * END OF FILE * * *
```

APPENDIX C

Sample TSU model output using rule 5

```
FOR YEAR 1992.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281


FOR YEAR 1992.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281


FOR YEAR 1992.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281
```

```
FOR YEAR 1992.********************

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281


FOR YEAR 1992.********************

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281


FOR YEAR 1993.********************

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
```

```
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.951


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.917


FOR YEAR 1993.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
```

```
    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    8
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    9
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.824


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.581


 FOR TESTSTAND-QUARTER NO.    3

    FOR ENTRY NO.    1
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   0.463


FOR YEAR 1993.**********************

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS    IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
```

```
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.950


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.918


FOR YEAR 1993.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
```

```
    FOR ENTRY NO.    2
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.949


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.919


FOR YEAR 1993.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS    IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
```

```
    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.970


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.898


FOR YEAR 1994.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
```

```
FOR YEAR 1999.**********

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   9
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.  10
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.  11
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.  12
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.994
```

```
 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  2 =   0.012


 FOR TESTSTAND-QUARTER NO.    3

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   0.084


FOR YEAR 2000.**********************

USING RULE NO. 5 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
```

```
TO FIND BEST RUN NO. FOR YEAR  1992.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1993.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      2.
TO FIND BEST RUN NO. FOR YEAR  1994.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1995.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1996.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1997.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      5.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1998.-------------------------
```

PUMINR	PDMINR	CUMINR	CDMINR	TQMINR
1.	1.	2.	2.	1.

PUMAXR	PDMAXR	CUMAXR	CDMAXR	TQMAXR
1.	1.	1.	1.	1.

TO FIND BEST RUN NO. FOR YEAR 1999.----------

PUMINR	PDMINR	CUMINR	CDMINR	TQMINR
1.	1.	1.	1.	1.

PUMAXR	PDMAXR	CUMAXR	CDMAXR	TQMAXR
1.	1.	1.	1.	1.

TO FIND BEST RUN NO. FOR YEAR 2000.----------

PUMINR	PDMINR	CUMINR	CDMINR	TQMINR
1.	1.	1.	1.	1.

PUMAXR	PDMAXR	CUMAXR	CDMAXR	TQMAXR
1.	1.	1.	1.	1.

TO FIND BEST RUN NO. FOR YEAR 2001.----------

PUMINR	PDMINR	CUMINR	CDMINR	TQMINR
1.	1.	1.	1.	1.

PUMAXR	PDMAXR	CUMAXR	CDMAXR	TQMAXR
1.	1.	1.	1.	1.

S L A M S U M M A R Y R E P O R T

SIMULATION PROJECT NASA3 BY D LINTON

DATE 5/20/1985 RUN NUMBER 1 OF 1

CURRENT TIME 0.7350E+01
STATISTICAL ARRAYS CLEARED AT TIME 0.0000E+00

FILE STATISTICS

TABLE NUMBER 1
RUN NUMBER 1

YEAR OF PAYLOAD	MIN # PLXP TO SS	MAX PLXP TO SS	AVG PLXP TO SS
0.1992E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1993E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1994E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1995E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.1996E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1997E+04	0.9000E+01	0.9000E+01	0.9000E+01
0.1998E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1999E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.2000E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.2001E+04	0.7000E+01	0.7000E+01	0.7000E+01
MINIMUM	0.2000E+01	0.2000E+01	0.2000E+01
MAXIMUM	0.9000E+01	0.9000E+01	0.9000E+01

PLOT NUMBER 1
RUN NUMBER 1

SCALES OF PLOT

=MIN # PLXP T0.000E+00 0.500E+02 0.100E+03
=MAX PLXP TO 0.000E+00 0.500E+02 0.100E+03
=AVG PLXP TO 0.000E+00 0.500E+02 0.100E+03

```
             0   10   20   30   40   50   60   70   80   90  100 DUPS
EAR OF PAYLOAD

 0.1992E+04  +L                    +                        + LH LA
 0.1993E+04  +  L                   +                        + LH LA
 0.1994E+04  +  L                   +                        + LH LA
 0.1995E+04  +   L                  +                        + LH LA
 0.1996E+04  +  L                   +                        + LH LA
 0.1997E+04  +    L                 +                        + LH LA
 0.1998E+04  +   L                  +                        + LH LA
 0.1999E+04  +   L                  +                        + LH LA
 0.2000E+04  +  L                   +                        + LH LA
 0.2001E+04  +   L                  +                        + LH LA
```

TABLE NUMBER 2
RUN NUMBER 1

YEAR OF PAYLOAD	MIN PLXP FM SS	MAX PLXP FM SS	AVG PLXP FM SS
0.1992E+04	0.0000E+00	0.0000E+00	0.0000E+00
0.1993E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1994E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1995E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1996E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1997E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1998E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1999E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.2000E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.2001E+04	0.7000E+01	0.7000E+01	0.7000E+01
MINIMUM	0.0000E+00	0.0000E+00	0.0000E+00
MAXIMUM	0.8000E+01	0.8000E+01	0.8000E+01

PLOT NUMBER 2
RUN NUMBER 1

SCALES OF PLOT

=MIN PLXP FM 0.000E+00 0.500E+02 0.100E+03
=MAX PLXP FM 0.000E+00 0.500E+02 0.100E+03
=AVG PLXP FM 0.000E+00 0.500E+02 0.100E+03

```
                0   10   20   30   40   50   60   70   80   90  100 DUPS
EAR OF PAYLOAD

 0.1992E+04   L                         +                         + LH LA
 0.1993E+04   +  L                      +                         + LH LA
 0.1994E+04   +  L                      +                         + LH LA
 0.1995E+04   +  L                      +                         + LH LA
 0.1996E+04   +  L                      +                         + LH LA
 0.1997E+04   +   L                     +                         + LH LA
 0.1998E+04   +   L                     +                         + LH LA
 0.1999E+04   +   L                     +                         + LH LA
 0.2000E+04   +   L                     +                         + LH LA
 0.2001E+04   +   L                     +                         + LH LA
                0   10   20   30   40   50   60   70   80   90  100 DUPS
EAR OF PAYLOAD
```

TABLE NUMBER 3
RUN NUMBER 1

YEAR OF PAYLOAD	MIN CBE TO SS	MAX CBE TO SS	AVG CBE TO SS
0.1992E+04	0.2810E+00	0.2810E+00	0.2810E+00
0.1993E+04	0.9510E+00	0.9510E+00	0.9510E+00
0.1994E+04	0.4510E+00	0.4510E+00	0.4510E+00
0.1995E+04	0.9490E+00	0.9490E+00	0.9490E+00
0.1996E+04	0.4020E+00	0.4020E+00	0.4020E+00
0.1997E+04	0.2651E+01	0.2651E+01	0.2651E+01
0.1998E+04	0.3685E+00	0.3685E+00	0.3685E+00
0.1999E+04	0.6700E+00	0.6700E+00	0.6700E+00
0.2000E+04	0.4570E+00	0.4570E+00	0.4570E+00
0.2001E+04	0.6140E+00	0.6140E+00	0.6140E+00
MINIMUM	0.2810E+00	0.2810E+00	0.2810E+00
MAXIMUM	0.2651E+01	0.2651E+01	0.2651E+01

PLOT NUMBER 3
RUN NUMBER 1

SCALES OF PLOT

=MIN CBE TO S0.000E+00 0.500E+02 0.100E+03
=MAX CBE TO S0.000E+00 0.500E+02 0.100E+03
=AVG CBE TO S0.000E+00 0.500E+02 0.100E+03

```
             0   10   20   30   40   50   60   70   80   90  100 DUPS
EAR OF PAYLOAD

 0.1992E+04  L                        +                        + LH LA
 0.1993E+04  L                        +                        + LH LA
 0.1994E+04  L                        +                        + LH LA
 0.1995E+04  L                        +                        + LH LA
 0.1996E+04  L                        +                        + LH LA
 0.1997E+04  +L                       +                        + LH LA
 0.1998E+04  L                        +                        + LH LA
 0.1999E+04  L                        +                        + LH LA
 0.2000E+04  L                        +                        + LH LA
 0.2001E+04  L                        +                        + LH LA
             0   10   20   30   40   50   60   70   80   90  100 DUPS
EAR OF PAYLOAD
```

TABLE NUMBER 4
RUN NUMBER 1

YEAR OF PAYLOAD	MIN CBE FM SS	MAX CBE FM SS	AVG CBE FM SS
0.1992E+04	0.0000E+00	0.0000E+00	0.0000E+00
0.1993E+04	0.9170E+00	0.9170E+00	0.9170E+00
0.1994E+04	0.5610E+00	0.5610E+00	0.5610E+00
0.1995E+04	0.4100E+00	0.4100E+00	0.4100E+00
0.1996E+04	0.3420E+00	0.3420E+00	0.3420E+00
0.1997E+04	0.5270E+00	0.5270E+00	0.5270E+00
0.1998E+04	0.3645E+00	0.3645E+00	0.3645E+00
0.1999E+04	0.4200E+00	0.4200E+00	0.4200E+00
0.2000E+04	0.7570E+00	0.7570E+00	0.7570E+00
0.2001E+04	0.4200E+00	0.4200E+00	0.4200E+00
MINIMUM	0.0000E+00	0.0000E+00	0.0000E+00
MAXIMUM	0.9170E+00	0.9170E+00	0.9170E+00

PLOT NUMBER 4
RUN NUMBER 1

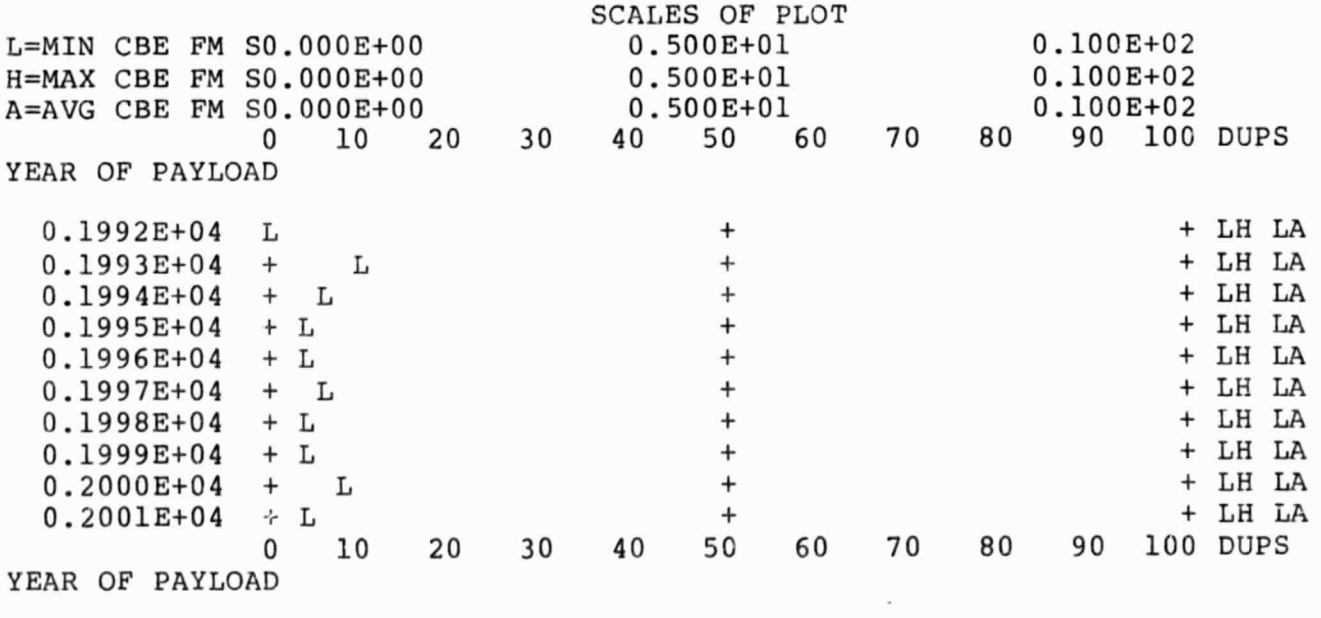


TABLE NUMBER 5
RUN NUMBER 1

YEAR OF PAYLOAD	MIN TQS NEEDED	MAX TQS NEEDED	AVG TQS NEEDED
0.1992E+04	0.1000E+01	0.1000E+01	0.1000E+01
0.1993E+04	0.2000E+01	0.3000E+01	0.2200E+01
0.1994E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1995E+04	0.3000E+01	0.3000E+01	0.3000E+01
0.1996E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1997E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1998E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1999E+04	0.3000E+01	0.3000E+01	0.3000E+01
0.2000E+04	0.3000E+01	0.3000E+01	0.3000E+01
0.2001E+04	0.3000E+01	0.3000E+01	0.3000E+01
MINIMUM	0.1000E+01	0.1000E+01	0.1000E+01
MAXIMUM	0.5000E+01	0.5000E+01	0.5000E+01

PLOT NUMBER 5
RUN NUMBER 1

SCALES OF PLOT

L=MIN TQS NEED 0.000E+00 0.500E+01 0.100E+02
H=MAX TQS NEED 0.000E+00 0.500E+01 0.100E+02
A=AVG TQS NEED 0.000E+00 0.500E+01 0.100E+02

```
                0    10    20    30    40    50    60    70    80    90   100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  +     L                       +                             + LH LA
  0.1993E+04  +           LA    H           +                             +
  0.1994E+04  +           L                 +                             + LH LA
  0.1995E+04  +                 L           +                             + LH LA
  0.1996E+04  +           L                 +                             + LH LA
  0.1997E+04  +                             L                             + LH LA
  0.1998E+04  +           L                 +                             + LH LA
  0.1999E+04  +                 L           +                             + LH LA
  0.2000E+04  +                 L           +                             + LH LA
  0.2001E+04  +                 L           +                             + LH LA
                0    10    20    30    40    50    60    70    80    90   100 DUPS
YEAR OF PAYLOAD
```

APPENDIX D

Complete TSU model output using rule 7

SLAM II VERSION 2.3

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(317)463-5557

```
GEN,D LINTON,NASA3,05/20/85,1,,,,,,72;
LIM,32,10,400;
PRI/30,LVF(2)/31,LVF(5);
;
RECORD(1),SS(20),YEAR OF PAYLOAD,11,B,1.,,,NO;
VAR,SS(21),L,MIN # PLXP TO SS,0,100; PUMIN
VAR,SS(22),H,MAX PLXP TO SS,0,100;X;PUMAX
VAR,SS(23),A,AVG PLXP TO SS,0,100;X;PUAVG
RECORD(2),SS(20),YEAR OF PAYLOAD,12,B,1.,,,NO;
VAR,SS(24),L,MIN PLXP FM SS,0,100;X; PDMIN
VAR,SS(25),H,MAX PLXP FM SS,0,100;X; PDMAX
VAR,SS(26),A,AVG PLXP FM SS,0,100;X; PDAVG
RECORD(3),SS(20),YEAR OF PAYLOAD,13,B,1.,,,NO;
VAR,SS(27),L,MIN CBE TO SS,0,100;X; CUMIN
VAR,SS(28),H,MAX CBE TO SS,0,100;X; CUMAX
VAR,SS(29),A,AVG CBE TO SS,0,100;X; CUAVG
RECORD(4),SS(20),YEAR OF PAYLOAD,14,B,1.,,,NO;
VAR,SS(30),L,MIN CBE FM SS,0,10;    CDMIN
VAR,SS(31),H,MAX CBE FM SS,0,10;    CDMAX
VAR,SS(32),A,AVG CBE FM SS,0,10;    CDAVG
RECORD(5),SS(20),YEAR OF PAYLOAD,15,B,1.,,,NO;
VAR,SS(33),L,MIN TQS NEEDED,0,10;   TQSMIN
VAR,SS(34),H,MAX TQS NEEDED,0,10;   TQSMAX
VAR,SS(35),A,AVG TQS NEEDED,0,10;   TQSAVG
;
;1 ENTITY=1 PAYLOAD TRANSPORT
;II=INDEX ASSOCIATED WITH ANY TESTSTAND QUARTER(TQ)
;FILE II=HOLDS ALL ENTITIES ASSOC. WITH ONE TQ,1<=II<=28
;FILE 29=OVERFLOW IF XX(35)= 7
;FILE 30=ALL ENTITIES FOR ALL YEARS AT NODE ALLP
;FILE 31=INPUT FILE FOR PAYLOAD TRANSPORTS AT NODE PYLD
;FILE 32=DUPLICATED INPUT FILE, A GATE
;
;XX(II)=TOTAL AMOUNT OF CBE CURRENTLY IN TQ II,1<=II<=28
;XX(31)=I, IF RULE NO. I,1<=I<=8,SET BY USER IN INTLC,IS IN EFFECT
;XX(32)=TOTAL NO. OF RUNS DESIRED,SET BY USER IN INTLC
;XX(33)=CURRENT NUMBER OF RUNS COMPLETED NOW(XX(33)=0 IN INTLC)
;XX(34)=TOTAL NO. ENTITIES IN FILE 30(NOT COUNTING A1=0 ENTITIES)
;XX(35)=TOTAL NO. OF TESTSTANDS BEING MODELED(1<=XX(35)<=7)
;XX(36)=CURRENT YEAR BEING PROCESSED(SET TO XX(37) IN INTLC)
;XX(37)=FIRST YEAR IN THE SEQUENCE
;XX(38)=LAST YEAR IN SEQUENCE
;ATRIB(1)=MISSION #(A1=0,A5=1000 FOR LAST ENTITY)
;      (2)=YEAR OF PAYLOAD
;      (3)=NOT USED
;      (4)=CBE VALUE
;      (5)=RANDOM NO. FOR SHUFFLING INPUT DATA FOR SUCCESSIVE RUNS
;      (6)=FILE NUMBER FOR FILING ENTITIES INTO APPROPRIATE TQ
;      (7)=0,DOWNFLOW;1,LAUNCH
;      (8)=0,NONHAZARDOUS;1,HAZARDOUS
;      (9)=0,LOW INCLINATION ORBIT;1,POLAR ORBIT
;     (10)=1,IF ENTITY AT NODE SA10 SATISFIES RULE ASSOCIATED
;            WITH XX(31),SS(II), FOR FILING AT II
;          =0,IF ENTITY DOES NOT SATISFY RULE FOR FILE II AT NODE SA10
;SS(II)=1,2,...,8, DEPENDING UPON VALUE OF XX(31) AND ATRIBS 7,8,9
;       FOR FILE II (SET AT NODE STSS)
;
;RULE 1 = SEGREGATE ON A7,A8,A9    RULE 5=SEGREGATE ON A9 ONLY
;RULE 2 =           ON    A8,A9    RULE 6=          ON A8 ONLY
;RULE 3 =           ON A7,   A9    RULE 7=          ON A7 ONLY
```

```
;RULE 4 =            ON A7,A8        RULE 8=  NO SEGREGATION
;
;
INTLC,XX(31)=7,XX(32)=5,XX(33)=0,XX(34)=8,XX(35)=7;
INTLC,XX(36)=1992,XX(37)=1992,XX(38)=2001;
NETWORK;
        RES/PYLDXPRT(0),31; FOR PAYLOAD XPRTS FOR YEAR IN PROCESS
        RES/ALLPYLDS(1),30; FOR ALL PYLD XPRTS FOR ALL YEARS
        GAT/DUPGATE,CLOSED,32;
        RES/TQ1(0),1;
        RES/TQ2(0),2;
        RES/TQ3(0),3;
        RES/TQ4(0),4;
        RES/TQ5(0),5;
        RES/TQ6(0),6;
        RES/TQ7(0),7;
        RES/TQ8(0),8;
        RES/TQ9(0),9;
        RES/TQ10(0),10;
        RES/TQ11(0),11;
        RES/TQ12(0),12;
        RES/TQ13(0),13;
        RES/TQ14(0),14;
        RES/TQ15(0),15;
        RES/TQ16(0),16;
        RES/TQ17(0),17;
        RES/TQ18(0),18;
        RES/TQ19(0),19;
        RES/TQ20(0),20;
        RES/TQ21(0),21;
        RES/TQ22(0),22;
        RES/TQ23(0),23;
        RES/TQ24(0),24;
        RES/TQ25(0),25;
        RES/TQ26(0),26;
        RES/TQ27(0),27;
        RES/TQ28(0),28;
        RES/MORETSDS(0),29;
ALLP    AWAIT(30),ALLPYLDS/1,2; M=2
         ACT,,XX(36).GE.ATRIB(2),PYLD;
         ACT,,XX(36).GE.ATRIB(2),NXTY;
         ACT,,,ALLP;
         ACT,.01,,NEXT;
NXTY    FREE,ALLPYLDS/1;
T1      TERM;
;
PYLD    AWAIT(31),PYLDXPRT/1,2; M=2
         ACT,,ATRIB(1).EQ.0.,DUPG;LAST ENTITY 4 ALL RUNS HAS A1,A5 SET
         ACT,,ATRIB(1).GT.0,II0;
         ACT,,ATRIB(1).EQ.0,PRNT;
         ACT,,,ARAN;
ARAN    ASS,ATRIB(5)=DRAND;
DUPG    AWAIT(32),DUPGATE;
         ACT,,,PYLD;
PRNT    EVENT,3,1;JEVNT=3,PRINT OUT FILES,XX(33)=XX(33)+1
         ACT,,XX(33).GE.XX(32),ENDY;
        ACT,.01,,OPND;DELAY OPENING SO ZERO TIME ACTIVS COMPLETED
OPND    OPEN,DUPGATE;
         ACT,.01;
        CLOSE,DUPGATE;
         ACT,.01,,NEXT;
```

```
ENDY    ASS,XX(36)=XX(36)+1,XX(33)=0,1;
         ACT,,XX(36).GT.XX(38),END;IF DONE,TERMINATE
         ACT,,,NXTY;DO NEXT YEARS ENTITIES
END     TERM,1; END LAST RUN OF LAST YEAR
II0     ASS,II=0;
G0      GOON;
IIP1    ASS,II=II+1,1;
G1      GOON,1; M=1
         ACT,,II.GT.4*XX(35),MORE; XX(35)=NO. TESTSTANDS MODELED
         ACT,,XX(II)+ATRIB(4).LE.1.,G2;
         ACT,,,G0;
MORE    ASS,ATRIB(6)=4*XX(35)+1;
         ACT,,,G3;
G2      GOON,1;
         ACT,,NNQ(II).GT.0,SA10;
         ACT,,NNQ(II).EQ.0,A1;
SA10    EVENT,2,1; JEVNT=2, SET ATRIB(10)
         ACT,,ATRIB(10).EQ.1,A1; ENTITY MATCHES RULE FOR II
         ACT,,ATRIB(10).EQ.0,G0; ENTITY DOESNT MATCH RULE AT FILE II
A1      ASS,XX(II)=XX(II)+ATRIB(4),ATRIB(6)=II,1;
          ACT,,ATRIB(10).EQ.0,STSS;
          ACT,,ATRIB(10).EQ.1,G3;
STSS    EVENT,1,1; JEVNT=1,SET SS(II) BASED ON XX(31) RULE NUMBER
         ACT,,,G3;
G3      GOON,2;
          ACT,.01,,NEXT;
          ACT,,,TSDS;
NEXT    FREE,PYLDXPRT/1,1;
        TERM;
TSDS    AWAIT(ATRIB(6)=1,29),ATRIB(6)/1;
        TERM;
        ENDNETWORK;
INIT,0.,20.;
;ONTR,TRACE,1.5,3.,2,5,-33,-36,-37,-38;
;NT/30,1,1993,0,.24,1,0,0,0,0; A7=A8=A9=0
;NT/30,2,1993,0,.24,5,0,0,0,1; A7=A8=0,A9=1
;NT/30,3,1993,0,.60,3,0,0,1,0; A7=A9=0,A8=1
;NT/30,4,1993,0,.36,2,0,1,0,0; A7=1,A8=A9=0
;NT/30,5,1993,0,.50,4,0,0,1,1; A7=0,A8=A9=1
;NT/30,6,1993,0,.50,6,0,1,0,1; A7=A9=1,A8=0
;NT/30,7,1993,0,.24,7,0,1,1,0; A7=A8=1,A9=0
;NT/30,8,1993,0,.18,8,0,1,1,1; A7=A8=A9=1
;NT/30,0,1993,0,0,1000.; LAST ENTRY IN FILE 30
;NT/30,1,1994,0,.72,1,0,0,0,0;1ST ENTRY OF 1994
;NT/30,2,1994,0,.52,2,0,0,0,1;
;NT/30,3,1994,0,.52,3,0,0,1,0;
;NT/30,4,1994,0,.47,4,0,1,0,0;
;NT/30,5,1994,0,.47,5,0,0,1,1;
;NT/30,6,1994,0,.27,6,0,1,0,1;
;NT/30,7,1994,0,.27,7,0,1,1,0;
;NT/30,8,1994,0,.27,8,0,1,1,1;
;NT/30,9,1994,0,.27,9,0,1,1,1;
;NT/30,0,1994,0,0,1000; LAST 1994 ENTRY
;NT/30,0,1995,0,0,1000;ONLY 1995 ENTRY
; NASA DATA MAY 1985, FOR YEARS 1992 TO 2001
ENT/30,0,1992,0,0,1000; DUMMY ENTRIES FOR FOR1 1992 TO 2002
ENT/30,0,1993,0,0,1000;
ENT/30,0,1994,0,0,1000;
ENT/30,0,1995,0,0,1000;
ENT/30,0,1996,0,0,1000;
ENT/30,0,1997,0,0,1000;
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ENT/30,0,1998,0,0,1000;
ENT/30,0,1999,0,0,1000;
ENT/30,0,2000,0,0,1000;
ENT/30,0,2001,0,0,1000;
ENT/30,0,2002,0,0,1000; LAST DUMMY ENTRY FOR LAST YEAR + (1)
; BEGINNING OF ACTUAL DATA FOR  1992  TO  2001
ENT/30,1,1992,0,.114,0,0,1,0,0; ASSUME A5=DRAND # =0 FOR INITIAL DATA
ENT/30,1,1994,0,.114,0,0,0,0,0;
ENT/30,4,1993,0,.148,0,0,1,0,0;
ENT/30,4,1995,0,.194,0,0,1,0,0;
ENT/30,4,1995,0,.074,0,0,0,0,0;
ENT/30,4,1997,0,.194,0,0,1,0,0;
ENT/30,4,1997,0,.074,0,0,0,0,0;
ENT/30,4,1999,0,.194,0,0,1,0,0;
ENT/30,4,1999,0,.074,0,0,0,0,0;
ENT/30,4,2001,0,.194,0,0,1,0,0;
ENT/30,4,2001,0,.074,0,0,0,0,0;
ENT/30,6,1995,0,.119,0,0,1,0,0;
ENT/30,6,1998,0,.0185,0,0,1,0,0;
ENT/30,6,1998,0,.0185,0,0,0,0,0;
ENT/30,6,2000,0,.119,0,0,0,0,0;
ENT/30,7,1995,0,.185,0,0,1,0,0;
ENT/30,7,1998,0,.004,0,0,1,0,0;
ENT/30,7,1998,0,.004,0,0,0,0,0;
ENT/30,7,2000,0,.185,0,0,0,0,0;
ENT/30,8,1995,0,.111,0,0,1,0,1; POLAR FOR MISSION 8
ENT/30,8,1996,0,.006,0,0,1,0,1;
ENT/30,8,1996,0,.006,0,0,0,0,1;
ENT/30,8,1997,0,.006,0,0,1,0,1;
ENT/30,8,1997,0,.006,0,0,0,0,1;
ENT/30,8,1998,0,.006,0,0,1,0,1;
ENT/30,8,1998,0,.006,0,0,0,0,1;
ENT/30,8,1999,0,.006,0,0,1,0,1;
ENT/30,8,1999,0,.006,0,0,0,0,1;
ENT/30,8,2000,0,.006,0,0,1,0,1;
ENT/30,8,2000,0,.006,0,0,0,0,1;
ENT/30,8,2001,0,.006,0,0,1,0,1;
ENT/30,8,2001,0,.006,0,0,0,0,1;
;
;
;FROM MISSION 11 (2ND PAGE OF DATA)
ENT/30,11,1993,0,.463,0,0,1,0,0;
ENT/30,11,1996,0,.056,0,0,1,0,0;
ENT/30,11,1999,0,.056,0,0,1,0,0;
ENT/30,13,1993,0,.581,0,0,0,0,0;
ENT/30,16,1994,0,.111,0,0,1,0,0;
ENT/30,16,1994,0,.111,0,0,0,0,0;
ENT/30,16,1997,0,.111,0,0,1,0,0;
ENT/30,16,1997,0,.111,0,0,0,0,0;
ENT/30,16,2000,0,.111,0,0,1,0,0;
ENT/30,16,2000,0,.111,0,0,0,0,0;
ENT/30,20,1997,0,1.,0,0,1,0,0;  CBE=1
ENT/30,20,1997,0,1.,0,0,1,0,0;  CBE=1
ENT/30,20,1999,0,.074,0,0,1,0,0;
ENT/30,20,1999,0,.004,0,0,0,0,0;
;
ENT/30,20,2001,0,.074,0,0,1,0,0;
ENT/30,20,2001,0,.004,0,0,0,0,0;
ENT/30,22,1992,0,.167,0,0,1,0,0;
ENT/30,22,1993,0,.085,0,0,1,0,0;
ENT/30,22,1993,0,.085,0,0,1,0,0;
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244  ENT/30,22,1993,0,.085,0,0,1,0,0;
245  ENT/30,22,1993,0,.085,0,0,1,0,0;
246  ENT/30,22,1993,0,.084,0,0,0,0,0;
247  ENT/30,22,1993,0,.084,0,0,0,0,0;
248  ENT/30,22,1993,0,.084,0,0,0,0,0;
249  ENT/30,22,1993,0,.084,0,0,0,0,0;
250  ENT/30,22,1994,0,.085,0,0,1,0,0;
251  ENT/30,22 1994,0,.085,0,0,1,0,0;
252  ENT/30,22,1994,0,.085,0,0,1,0,0;
253  ENT/30,22,1994,0,.085,0,0,1,0,0;
254  ENT/30,22,1994,0,.084,0,0,0,0,0;
255  ENT/30,22,1994,0,.084,0,0,0,0,0;
256  ENT/30,22,1994,0,.084,0,0,0,0,0;
257  ENT/30,22,1994,0,.084,0,0,0,0,0;
258  ENT/30,22,1995,0,.085,0,0,1,0,0;
259  ENT/30,22,1995,0,.085,0,0,1,0,0;
260  ENT/30,22,1995,0,.085,0,0,1,0,0;
261  ENT/30,22,1995,0,.085,0,0,1,0,0;
262  ENT/30,22,1995,0,.084,0,0,0,0,0;
263  ENT/30,22,1995,0,.084,0,0,0,0,0;
264  ENT/30,22,1995,0,.084,0,0,0,0,0;
265  ENT/30,22,1995,0,.084,0,0,0,0,0;
266  ENT/30,22,1996,0,.085,0,0,1,0,0;
267  ENT/30,22,1996,0,.085,0,0,1,0,0;
268  ENT/30,22,1996,0,.085,0,0,1,0,0;
269  ENT/30,22,1996,0,.085,0,0,1,0,0;
270  ENT/30,22,1996,0,.084,0,0,0,0,0;
271  ENT/30,22,1996,0,.084,0,0,0,0,0;
272  ENT/30,22,1996,0,.084,0,0,0,0,0;
273  ENT/30,22,1996,0,.084,0,0,0,0,0;
274  ENT/30,22,1997,0,.085,0,0,1,0,0;
275  ENT/30,22,1997,0,.085,0,0,1,0,0;
276  ENT/30,22,1997,0,.085,0,0,1,0,0;
277  ENT/30,22,1997,0,.085,0,0,1,0,0;
278  ENT/30,22,1997,0,.084,0,0,0,0,0;
279  ENT/30,22,1997,0,.084,0,0,0,0,0;
280  ENT/30,22,1997,0,.084,0,0,0,0,0;
281  ENT/30,22,1997,0,.084,0,0,0,0,0;
282  ENT/30,22,1998,0,.085,0,0,1,0,0;
283  ENT/30,22,1998,0,.085,0,0,1,0,0;
284  ENT/30,22,1998,0,.085,0,0,1,0,0;
285  ENT/30,22,1998,0,.085,0,0,1,0,0;
286  ENT/30,22,1998,0,.084,0,0,0,0,0;
287  ENT/30,22,1998,0,.084,0,0,0,0,0;
288  ENT/30,22,1998,0,.084,0,0,0,0,0;
289  ENT/30,22,1998,0,.084,0,0,0,0,0;
290  ENT/30,22,1999,0,.085,0,0,1,0,0;
291  ENT/30,22,1999,0,.085,0,0,1,0,0;
292  ENT/30,22,1999,0,.085,0,0,1,0,0;
293  ENT/30,22,1999,0,.085,0,0,1,0,0;
294  ENT/30,22,1999,0,.084,0,0,0,0,0;
295  ENT/30,22,1999,0,.084,0,0,0,0,0;
296  ENT/30,22,1999,0,.084,0,0,0,0,0;
297  ENT/30,22,1999,0,.084,0,0,0,0,0;
298  ENT/30,22,2000,0,.085,0,0,1,0,0;
299  ENT/30,22,2000,0,.085,0,0,1,0,0;
300  ENT/30,22,2000,0,.085,0,0,1,0,0;
301  ENT/30,22,2000,0,.085,0,0,1,0,0;
302  ENT/30,22,2000,0,.084,0,0,0,0,0;
303  ENT/30,22,2000,0,.084,0,0,0,0,0;
304  ENT/30,22,2000,0,.084,0,0,0,0,0;
```

```
305  ENT/30,22,2000,0,.084,0,0,0,0,0;
306  ENT/30,22,2001,0,.085,0,0,1,0,0;
307  ENT/30,22,2001,0,.085,0,0,1,0,0;
308  ENT/30,22,2001,0,.085,0,0,1,0,0;
309  ENT/30,22,2001,0,.085,0,0,1,0,0;
310  ENT/30,22,2001,0,.084,0,0,0,0,0;
311  ENT/30,22,2001,0,.084,0,0,0,0,0;
312  ENT/30,22,2001,0,.084,0,0,0,0,0;
313  ENT/30,22,2001,0,.084,0,0,0,0,0;
314  ; END OF DATA FOR MISSIONS SAAX 1,4,6,7,8,11,13,16,20,22
315  ; SOME MISSIONS WERE SKIPPED DUE TO UNCLEAR, INCORRECT OR INSUFF. DATA
316  FIN;
```

S L A M E C H O R E P O R T

SIMULATION PROJECT NASA3 BY D LINTON

DATE 5/20/1985 RUN NUMBER 1 OF 1

SLAM VERSION JUN 84

GENERAL OPTIONS

PRINT INPUT STATEMENTS (ILIST):	YES
PRINT ECHO REPORT (IECHO):	YES
EXECUTE SIMULATIONS (IXQT):	YES
WARN OF DESTROYED ENTITIES:	NO
PRINT INTERMEDIATE RESULTS HEADING (IPIRH):	YES
PRINT SUMMARY REPORT (ISMRY):	YES

LIMITS ON FILES

MAXIMUM NUMBER OF USER FILES (MFILS):	32
MAXIMUM NUMBER OF USER ATTRIBUTES (MATR):	10
MAXIMUM NUMBER OF CONCURRENT ENTRIES (MNTRY):	400

FILE SUMMARY

FILE NUMBER	INITIAL ENTRIES	RANKING CRITERION
1	0	FIFO
2	0	FIFO
3	0	FIFO
4	0	FIFO
5	0	FIFO
6	0	FIFO
7	0	FIFO
8	0	FIFO
9	0	FIFO
10	0	FIFO
11	0	FIFO
12	0	FIFO
13	0	FIFO
14	0	FIFO
15	0	FIFO
16	0	FIFO
17	0	FIFO
18	0	FIFO
19	0	FIFO
20	0	FIFO
21	0	FIFO
22	0	FIFO
23	0	FIFO
24	0	FIFO
25	0	FIFO
26	0	FIFO
27	0	FIFO

28	0	FIFO
29	0	FIFO
30	0	LVF (2)
31	0	LVF (5)
32	0	FIFO

CONTINUOUS VARIABLES

NUMBER OF DD EQUATIONS (NNEQD):	0
NUMBER OF SS EQUATIONS (NNEQS):	0
MINIMUM STEP SIZE (DTMIN):	0.1000E+19
MAXIMUM STEP SIZE (DTMAX):	0.1000E+21
TIME BETWEEN SAVE POINTS (DTSAV):	0.1000E+01
ACCURACY ERROR SPECIFICATION (LLERR):	WARNING
ABSOLUTE ERROR LIMIT (AAERR):	0.1000E-04
RELATIVE ERROR LIMIT (RRERR):	0.1000E-04

RECORDING OF PLOTS/TABLES

PLOT/TABLE NUMBER 1

INDEPENDENT VARIABLE:	SS(20)
IDENTIFIER:	YEAR OF PAYLOAD
DATA STORAGE UNIT:	TAPE/DISC 11
DATA OUTPUT FORMAT:	PLOT AND TABLE
TIME BETWEEN PLOT POINTS (DTPLT):	0.1000E+01
STARTING TIME OF PLOT (TTSRT):	0.0000E+00
ENDING TIME OF PLOT (TTEND):	0.2000E+02
DATA POINTS AT EVENTS (KKEVT):	NO

DEPENDENT VARIABLES

VARIABLE	SYM	IDENTIFIER	LOW ORD VALUE		HIGH ORD VALUE	
SS(21)	L	MIN # PLXP TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(22)	H	MAX PLXP TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(23)	A	AVG PLXP TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03

PLOT/TABLE NUMBER 2

INDEPENDENT VARIABLE:	SS(20)
IDENTIFIER:	YEAR OF PAYLOAD
DATA STORAGE UNIT:	TAPE/DISC 12
DATA OUTPUT FORMAT:	PLOT AND TABLE
TIME BETWEEN PLOT POINTS (DTPLT):	0.1000E+01
STARTING TIME OF PLOT (TTSRT):	0.0000E+00
ENDING TIME OF PLOT (TTEND):	0.2000E+02
DATA POINTS AT EVENTS (KKEVT):	NO

DEPENDENT VARIABLES

VARIABLE	SYM	IDENTIFIER	LOW ORD VALUE		HIGH ORD VALUE	
SS(24)	L	MIN PLXP FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(25)	H	MAX PLXP FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(26)	A	AVG PLXP FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03

PLOT/TABLE NUMBER 3

INDEPENDENT VARIABLE: SS(20)
IDENTIFIER: YEAR OF PAYLOAD
DATA STORAGE UNIT: TAPE/DISC 13
DATA OUTPUT FORMAT: PLOT AND TABLE
TIME BETWEEN PLOT POINTS (DTPLT): 0.1000E+01
STARTING TIME OF PLOT (TTSRT): 0.0000E+00
ENDING TIME OF PLOT (TTEND): 0.2000E+02
DATA POINTS AT EVENTS (KKEVT): NO

DEPENDENT VARIABLES

VARIABLE	SYM	IDENTIFIER	LOW ORD VALUE		HIGH ORD VALUE	
SS(27)	L	MIN CBE TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(28)	H	MAX CBE TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03
SS(29)	A	AVG CBE TO SS	VALUE IS	0.0E+00	VALUE IS	0.1E+03

PLOT/TABLE NUMBER 4

INDEPENDENT VARIABLE: SS(20)
IDENTIFIER: YEAR OF PAYLOAD
DATA STORAGE UNIT: TAPE/DISC 14
DATA OUTPUT FORMAT: PLOT AND TABLE
TIME BETWEEN PLOT POINTS (DTPLT): 0.1000E+01
STARTING TIME OF PLOT (TTSRT): 0.0000E+00
ENDING TIME OF PLOT (TTEND): 0.2000E+02
DATA POINTS AT EVENTS (KKEVT): NO

DEPENDENT VARIABLES

VARIABLE	SYM	IDENTIFIER	LOW ORD VALUE		HIGH ORD VALUE	
SS(30)	L	MIN CBE FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+02
SS(31)	H	MAX CBE FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+02
SS(32)	A	AVG CBE FM SS	VALUE IS	0.0E+00	VALUE IS	0.1E+02

PLOT/TABLE NUMBER 5

INDEPENDENT VARIABLE: SS(20)
IDENTIFIER: YEAR OF PAYLOAD
DATA STORAGE UNIT: TAPE/DISC 15
DATA OUTPUT FORMAT: PLOT AND TABLE
TIME BETWEEN PLOT POINTS (DTPLT): 0.1000E+01
STARTING TIME OF PLOT (TTSRT): 0.0000E+00
ENDING TIME OF PLOT (TTEND): 0.2000E+02
DATA POINTS AT EVENTS (KKEVT): NO

DEPENDENT VARIABLES

VARIABLE	SYM	IDENTIFIER	LOW ORD VALUE		HIGH ORD VALUE	
SS(33)	L	MIN TQS NEEDED	VALUE IS	0.0E+00	VALUE IS	0.1E+02
SS(34)	H	MAX TQS NEEDED	VALUE IS	0.0E+00	VALUE IS	0.1E+02
SS(35)	A	AVG TQS NEEDED	VALUE IS	0.0E+00	VALUE IS	0.1E+02

RANDOM NUMBER STREAMS

STREAM NUMBER	SEED VALUE	REINITIALIZATION OF STREAM

1	428956419	NO
2	1954324947	NO
3	1145661099	NO
4	1835732737	NO
5	794161987	NO
6	1329531353	NO
7	200496737	NO
8	633816299	NO
9	1410143363	NO
10	1282538739	NO

INITIALIZATION OPTIONS

BEGINNING TIME OF SIMULATION (TTBEG):	0.0000E+00
ENDING TIME OF SIMULATION (TTFIN):	0.2000E+02
STATISTICAL ARRAYS CLEARED (JJCLR):	YES
VARIABLES INITIALIZED (JJVAR):	YES
FILES INITIALIZED (JJFIL):	YES

NSET/QSET STORAGE ALLOCATION

DIMENSION OF NSET/QSET (NNSET):	100000
WORDS ALLOCATED TO FILING SYSTEM:	5600
WORDS ALLOCATED TO INDEXED LIST TAGS:	390
WORDS ALLOCATED TO NETWORK:	961
WORDS AVAILABLE FOR PLOTS/TABLES:	93049

INPUT ERRORS DETECTED: 0

EXECUTION WILL BE ATTEMPTED

INTERMEDIATE RESULTS

FOR YEAR 1992.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS IS RUN 1 OF 5

FOR TESTSTAND-QUARTER NO. 1

FOR ENTRY NO. 1
MISSION = 1. CBE= 0.114 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.

FOR ENTRY NO. 2
MISSION = 22. CBE= 0.167 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE 1 = 0.281

FOR YEAR 1992.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS IS RUN 2 OF 5

FOR TESTSTAND-QUARTER NO. 1

FOR ENTRY NO. 1
MISSION = 1. CBE= 0.114 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.

FOR ENTRY NO. 2
MISSION = 22. CBE= 0.167 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE 1 = 0.281

FOR YEAR 1992.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS IS RUN 3 OF 5

FOR TESTSTAND-QUARTER NO. 1

FOR ENTRY NO. 1
MISSION = 1. CBE= 0.114 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.

FOR ENTRY NO. 2
MISSION = 22. CBE= 0.167 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE 1 = 0.281

FOR YEAR 1992.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS IS RUN 4 OF 5

FOR TESTSTAND-QUARTER NO. 1

FOR ENTRY NO. 1
MISSION = 22. CBE= 0.167 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.

FOR ENTRY NO. 2
MISSION = 1. CBE= 0.114 U.1,D.0 = 1. H.1,NH.0 = 0. P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE 1 = 0.281

FOR YEAR 1992.**********

```
USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.167  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.281


FOR YEAR 1993.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.951


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.917


FOR YEAR 1993.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5
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 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.951


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.917


FOR YEAR 1993.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
```

```
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.917


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.951


FOR YEAR 1993.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.917


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
```

```
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.951


FOR YEAR 1993.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 11. CBE=  0.463  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  4. CBE=  0.148  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.951


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 13. CBE=  0.581  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.917


FOR YEAR 1994.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1
```

```
    FOR ENTRY NO.    1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.561


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.451


FOR YEAR 1994.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
```

```
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.561


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.451


FOR YEAR 1994.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.451


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
```

```
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.561


FOR YEAR 1994.************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1  H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.451


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.561


FOR YEAR 1994.****************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  1. CBE=  0.114  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
```

```
    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.561


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.451


FOR YEAR 1995.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  8. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
```

```
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.949


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.410


FOR YEAR 1995.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.949


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
```

```
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.410


FOR YEAR 1995.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.410


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  8. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.
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    FOR ENTRY NO.   8
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.949


FOR YEAR 1995.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  8. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1  H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.949


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.410


FOR YEAR 1995.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5
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    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1996.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1996.************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1996.*************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1996.*************************
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USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1996.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.   5
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.402


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.342


FOR YEAR 1997.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.651


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.527


 FOR TESTSTAND-QUARTER NO.    3

    FOR ENTRY NO.    1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   1.000


 FOR TESTSTAND-QUARTER NO.    4

    FOR ENTRY NO.    1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  4 =   1.000


FOR YEAR 1997.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    6
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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TOTAL CBE VALUE FOR FILE  1 =   0.651


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   1.000


 FOR TESTSTAND-QUARTER NO.   3

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  3 =   0.527


 FOR TESTSTAND-QUARTER NO.   4

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  4 =   1.000


FOR YEAR 1997.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
```

```
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.527


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.651


 FOR TESTSTAND-QUARTER NO.   3

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   1.000


 FOR TESTSTAND-QUARTER NO.   4

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  4 =   1.000


FOR YEAR 1997.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  1 =   0.651


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   1.000


 FOR TESTSTAND-QUARTER NO.   3

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22  CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   0.527


 FOR TESTSTAND-QUARTER NO.   4

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  4 =   1.000


FOR YEAR 1997.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1
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```
    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   1.000


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.527


 FOR TESTSTAND-QUARTER NO.   3

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  3 =   0.651


 FOR TESTSTAND-QUARTER NO.   4

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  1.000  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  4 =   1.000
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FOR YEAR 1998.************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.368


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.364


FOR YEAR 1998.************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1
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    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.364


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.368


FOR YEAR 1998.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.364


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.368


FOR YEAR 1998.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
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```
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.368


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  2 =   0.364


FOR YEAR 1998.************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
TOTAL CBE VALUE FOR FILE  1 =   0.364


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  7. CBE=  0.004  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  6. CBE=  0.018  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.368


FOR YEAR 1999.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.670


 FOR TESTSTAND-QUARTER NO.   2
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```
    FOR ENTRY NO.    1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.420


FOR YEAR 1999.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.420


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.    3
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    8
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  2 =   0.670


FOR YEAR 1999.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.670


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
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```
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.420


FOR YEAR 1999.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.420


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.   6
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.670


FOR YEAR 1999.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 11. CBE=  0.056  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.670


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   5
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.   6
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.420


FOR YEAR 2000.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.757


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.457
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FOR YEAR 2000.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.757


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.457


FOR YEAR 2000.**********

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1
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```
    FOR ENTRY NO.   1
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.757


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.457


FOR YEAR 2000.******* ******************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
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```
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.757


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.457


FOR YEAR 2000.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   2
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.457


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  6. CBE=  0.119  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  7. CBE=  0.185  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   8
     MISSION  = 16. CBE=  0.111  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.757


FOR YEAR 2001.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 1 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   3
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.614
```

```
 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    3
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.420


FOR YEAR 2001.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 2 OF 5

 FOR TESTSTAND-QUARTER NO.    1

    FOR ENTRY NO.    1
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.    4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    6
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.    7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.420


 FOR TESTSTAND-QUARTER NO.    2

    FOR ENTRY NO.    1
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.
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```
    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.614


FOR YEAR 2001.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 3 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.614


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
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```
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.420


FOR YEAR 2001.**********************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 4 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  1 =   0.420


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
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```
    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.614


FOR YEAR 2001.**************************

USING RULE NO. 7 WITH 7 TESTSTANDS,THIS   IS RUN 5 OF 5

 FOR TESTSTAND-QUARTER NO.   1

    FOR ENTRY NO.   1
     MISSION  =  4. CBE=  0.074  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   4
     MISSION  = 20. CBE=  0.004  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  = 22. CBE=  0.084  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 0. H.1,NH.0 = 0.  P.1,NP.0 = 1.
TOTAL CBE VALUE FOR FILE  1 =   0.420


 FOR TESTSTAND-QUARTER NO.   2

    FOR ENTRY NO.   1
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   2
     MISSION  = 20. CBE=  0.074  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   3
     MISSION  =  8. CBE=  0.006  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 1.

    FOR ENTRY NO.   4
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   5
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   6
     MISSION  =  4. CBE=  0.194  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.

    FOR ENTRY NO.   7
     MISSION  = 22. CBE=  0.085  U.1,D.0 = 1. H.1,NH.0 = 0.  P.1,NP.0 = 0.
TOTAL CBE VALUE FOR FILE  2 =   0.614

    TO FIND BEST RUN NO. FOR YEAR  1992.------------------------
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```
    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1993.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1994.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1995.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1996.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1997.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      5.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1998.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      2.      2.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  1999.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
TO FIND BEST RUN NO. FOR YEAR  2000.-------------------------

    PUMINR  PDMINR  CUMINR  CDMINR  TQMINR
        1.      1.      1.      1.      1.

    PUMAXR  PDMAXR  CUMAXR  CDMAXR  TQMAXR
        1.      1.      1.      1.      1.
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TO FIND BEST RUN NO. FOR YEAR 2001.----------

PUMINR	PDMINR	CUMINR	CDMINR	TQMINR
1.	1.	1.	1.	1.

PUMAXR	PDMAXR	CUMAXR	CDMAXR	TQMAXR
1.	1.	1.	1.	1.

S L A M S U M M A R Y R E P O R T

SIMULATION PROJECT NASA3 BY D LINTON

DATE 5/20/1985 RUN NUMBER 1 OF 1

CURRENT TIME 0.7350E+01
STATISTICAL ARRAYS CLEARED AT TIME 0.0000E+00

FILE STATISTICS

FILE NUMBER	ASSOCIATED NODE TYPE	AVERAGE LENGTH	STANDARD DEVIATION	MAXIMUM LENGTH	CURRENT LENGTH	AVERAGE WAIT TIME
1	AWAIT	3.106	2.419	8	0	0.074
2	AWAIT	2.506	2.285	8	0	0.068
3	AWAIT	0.219	0.929	7	0	0.070
4	AWAIT	0.039	0.195	1	0	0.058
5	AWAIT	0.000	0.000	0	0	0.000
6	AWAIT	0.000	0.000	0	0	0.000
7	AWAIT	0.000	0.000	0	0	0.000
8	AWAIT	0.000	0.000	0	0	0.000
9	AWAIT	0.000	0.000	0	0	0.000
10	AWAIT	0.000	0.000	0	0	0.000
11	AWAIT	0.000	0.000	0	0	0.000
12	AWAIT	0.000	0.000	0	0	0.000
13	AWAIT	0.000	0.000	0	0	0.000
14	AWAIT	0.000	0.000	0	0	0.000
15	AWAIT	0.000	0.000	0	0	0.000
16	AWAIT	0.000	0.000	0	0	0.000
17	AWAIT	0.000	0.000	0	0	0.000
18	AWAIT	0.000	0.000	0	0	0.000
19	AWAIT	0.000	0.000	0	0	0.000
20	AWAIT	0.000	0.000	0	0	0.000
21	AWAIT	0.000	0.000	0	0	0.000
22	AWAIT	0.000	0.000	0	0	0.000
23	AWAIT	0.000	0.000	0	0	0.000
24	AWAIT	0.000	0.000	0	0	0.000
25	AWAIT	0.000	0.000	0	0	0.000
26	AWAIT	0.000	0.000	0	0	0.000
27	AWAIT	0.000	0.000	0	0	0.000
28	AWAIT	0.000	0.000	0	0	0.000
29	AWAIT	0.000	0.000	0	0	0.000
30	AWAIT	60.326	38.784	129	1	3.122
31	AWAIT	7.475	4.704	17	0	0.084
32	AWAIT	6.583	4.692	17	0	0.074
33	CALENDAR	1.000	0.000	133	0	0.001

RESOURCE STATISTICS

RESOURCE NUMBER	RESOURCE LABEL	CURRENT CAPACITY	AVERAGE UTIL	STANDARD DEVIATION	MAXIMUM UTIL	CURRENT UTIL

1	PYLDXPRT	0	0.00	0.000	0	0
2	ALLPYLDS	1	1.00	0.000	1	1
3	TQ1	0	0.00	0.000	0	0
4	TQ2	0	0.00	0.000	0	0
5	TQ3	0	0.00	0.000	0	0
6	TQ4	0	0.00	0.000	0	0
7	TQ5	0	0.00	0.000	0	0
8	TQ6	0	0.00	0.000	0	0
9	TQ7	0	0.00	0.000	0	0
10	TQ8	0	0.00	0.000	0	0
11	TQ9	0	0.00	0.000	0	0
12	TQ10	0	0.00	0.000	0	0
13	TQ11	0	0.00	0.000	0	0
14	TQ12	0	0.00	0.000	0	0
15	TQ13	0	0.00	0.000	0	0
16	TQ14	0	0.00	0.000	0	0
17	TQ15	0	0.00	0.000	0	0
18	TQ16	0	0.00	0.000	0	0
19	TQ17	0	0.00	0.000	0	0
20	TQ18	0	0.00	0.000	0	0
21	TQ19	0	0.00	0.000	0	0
22	TQ20	0	0.00	0.000	0	0
23	TQ21	0	0.00	0.000	0	0
24	TQ22	0	0.00	0.000	0	0
25	TQ23	0	0.00	0.000	0	0
26	TQ24	0	0.00	0.000	0	0
27	TQ25	0	0.00	0.000	0	0
28	TQ26	0	0.00	0.000	0	0
29	TQ27	0	0.00	0.000	0	0
30	TQ28	0	0.00	0.000	0	0
31	MORETSDS	0	0.00	0.000	0	0

RESOURCE NUMBER	RESOURCE LABEL	CURRENT AVAILABLE	AVERAGE AVAILABLE	MINIMUM AVAILABLE	MAXIMUM AVAILABLE
1	PYLDXPRT	0	0.0000	0	0
2	ALLPYLDS	0	0.0000	0	1
3	TQ1	0	0.0000	0	0
4	TQ2	0	0.0000	0	0
5	TQ3	0	0.0000	0	0
6	TQ4	0	0.0000	0	0
7	TQ5	0	0.0000	0	0
8	TQ6	0	0.0000	0	0
9	TQ7	0	0.0000	0	0
10	TQ8	0	0.0000	0	0
11	TQ9	0	0.0000	0	0
12	TQ10	0	0.0000	0	0
13	TQ11	0	0.0000	0	0
14	TQ12	0	0.0000	0	0
15	TQ13	0	0.0000	0	0
16	TQ14	0	0.0000	0	0
17	TQ15	0	0.0000	0	0
18	TQ16	0	0.0000	0	0
19	TQ17	0	0.0000	0	0
20	TQ18	0	0.0000	0	0
21	TQ19	0	0.0000	0	0
22	TQ20	0	0.0000	0	0
23	TQ21	0	0.0000	0	0
24	TQ22	0	0.0000	0	0

25	TQ23	0	0.0000	0	0
26	TQ24	0	0.0000	0	0
27	TQ25	0	0.0000	0	0
28	TQ26	0	0.0000	0	0
29	TQ27	0	0.0000	0	0
30	TQ28	0	0.0000	0	0
31	MORETSDS	0	0.0000	0	0

GATE STATISTICS

GATE NUMBER	GATE LABEL	CURRENT STATUS	PCT. OF TIME OPEN
1	DUPGATE	CLOSED	0.0544

TABLE NUMBER 1
RUN NUMBER 1

YEAR OF PAYLOAD	MIN # PL XP TO SS	MAX PLXP TO SS	AVG PLXP TO SS
0.1992E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1993E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1994E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1995E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.1996E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1997E+04	0.9000E+01	0.9000E+01	0.9000E+01
0.1998E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1999E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.2000E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.2001E+04	0.7000E+01	0.7000E+01	0.7000E+01
MINIMUM	0.2000E+01	0.2000E+01	0.2000E+01
MAXIMUM	0.9000E+01	0.9000E+01	0.9000E+01

PLOT NUMBER 1
RUN NUMBER 1

```
                                  SCALES OF PLOT
L=MIN # PLXP TO 0.000E+00          0.500E+02          0.100E+03
H=MAX PLXP TO 0.000E+00          0.500E+02          0.100E+03
A=AVG PLXP TO 0.000E+00          0.500E+02          0.100E+03
              0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  +L                  +                  + LH LA
  0.1993E+04  +  L                +                  + LH LA
  0.1994E+04  +  L                +                  + LH LA
  0.1995E+04  +   L               +                  + LH LA
  0.1996E+04  +  L                +                  + LH LA
  0.1997E+04  +    L              +                  + LH LA
  0.1998E+04  +   L               +                  + LH LA
  0.1999E+04  +   L               +                  + LH LA
  0.2000E+04  +  L                +                  + LH LA
  0.2001E+04  +   L               +                  + LH LA
```

```
                0    10    20    30    40    50    60    70    80    90   100 DUPS
YEAR OF PAYLOAD
```

OUTPUT CONSISTS OF 10 POINT SETS (30 POINTS)

TABLE NUMBER 2
RUN NUMBER 1

YEAR OF PAYLOAD	MIN PLXP FM SS	MAX PLXP FM SS	AVG PLXP FM SS
0.1992E+04	0.0000E+00	0.0000E+00	0.0000E+00
0.1993E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1994E+04	0.6000E+01	0.6000E+01	0.6000E+01
0.1995E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1996E+04	0.5000E+01	0.5000E+01	0.5000E+01
0.1997E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1998E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.1999E+04	0.7000E+01	0.7000E+01	0.7000E+01
0.2000E+04	0.8000E+01	0.8000E+01	0.8000E+01
0.2001E+04	0.7000E+01	0.7000E+01	0.7000E+01
MINIMUM	0.0000E+00	0.0000E+00	0.0000E+00
MAXIMUM	0.8000E+01	0.8000E+01	0.8000E+01

PLOT NUMBER 2
RUN NUMBER 1

```
                                SCALES OF PLOT
L=MIN PLXP FM 0.000E+00          0.500E+02          0.100E+03
H=MAX PLXP FM 0.000E+00          0.500E+02          0.100E+03
A=AVG PLXP FM 0.000E+00          0.500E+02          0.100E+03
                0    10    20    30    40    50    60    70    80    90   100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  L                         +                         + LH LA
  0.1993E+04  +  L                      +                         + LH LA
  0.1994E+04  +  L                      +                         + LH LA
  0.1995E+04  +  L                      +                         + LH LA
  0.1996E+04  +  L                      +                         + LH LA
  0.1997E+04  +    L                    +                         + LH LA
  0.1998E+04  +    L                    +                         + LH LA
  0.1999E+04  +    L                    +                         + LH LA
  0.2000E+04  +    L                    +                         + LH LA
  0.2001E+04  +    L                    +                         + LH LA
                0    10    20    30    40    50    60    70    80    90   100 DUPS
YEAR OF PAYLOAD
```

OUTPUT CONSISTS OF 10 POINT SETS (30 POINTS)

TABLE NUMBER 3
RUN NUMBER 1

YEAR OF PAYLOAD	MIN CBE TO SS	MAX CBE TO SS	AVG CBE TO SS
0.1992E+04	0.2810E+00	0.2810E+00	0.2810E+00
0.1993E+04	0.9510E+00	0.9510E+00	0.9510E+00
0.1994E+04	0.4510E+00	0.4510E+00	0.4510E+00
0.1995E+04	0.9490E+00	0.9490E+00	0.9490E+00
0.1996E+04	0.4020E+00	0.4020E+00	0.4020E+00
0.1997E+04	0.2651E+01	0.2651E+01	0.2651E+01
0.1998E+04	0.3685E+00	0.3685E+00	0.3685E+00
0.1999E+04	0.6700E+00	0.6700E+00	0.6700E+00
0.2000E+04	0.4570E+00	0.4570E+00	0.4570E+00
0.2001E+04	0.6140E+00	0.6140E+00	0.6140E+00
MINIMUM	0.2810E+00	0.2810E+00	0.2810E+00
MAXIMUM	0.2651E+01	0.2651E+01	0.2651E+01

PLOT NUMBER 3
RUN NUMBER 1

SCALES OF PLOT

L=MIN CBE TO S0.000E+00 0.500E+02 0.100E+03
H=MAX CBE TO S0.000E+00 0.500E+02 0.100E+03
A=AVG CBE TO S0.000E+00 0.500E+02 0.100E+03

```
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  L                         +                         + LH LA
  0.1993E+04  L                         +                         + LH LA
  0.1994E+04  L                         +                         + LH LA
  0.1995E+04  L                         +                         + LH LA
  0.1996E+04  L                         +                         + LH LA
  0.1997E+04  +L                        +                         + LH LA
  0.1998E+04  L                         +                         + LH LA
  0.1999E+04  L                         +                         + LH LA
  0.2000E+04  L                         +                         + LH LA
  0.2001E+04  L                         +                         + LH LA
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD
```

OUTPUT CONSISTS OF 10 POINT SETS (30 POINTS)

TABLE NUMBER 4
RUN NUMBER 1

YEAR OF PAYLOAD	MIN CBE FM SS	MAX CBE FM SS	AVG CBE FM SS
0.1992E+04	0.0000E+00	0.0000E+00	0.0000E+00
0.1993E+04	0.9170E+00	0.9170E+00	0.9170E+00
0.1994E+04	0.5610E+00	0.5610E+00	0.5610E+00

0.1995E+04	0.4100E+00	0.4100E+00	0.4100E+00
0.1996E+04	0.3420E+00	0.3420E+00	0.3420E+00
0.1997E+04	0.5270E+00	0.5270E+00	0.5270E+00
0.1998E+04	0.3645E+00	0.3645E+00	0.3645E+00
0.1999E+04	0.4200E+00	0.4200E+00	0.4200E+00
0.2000E+04	0.7570E+00	0.7570E+00	0.7570E+00
0.2001E+04	0.4200E+00	0.4200E+00	0.4200E+00
MINIMUM	0.0000E+00	0.0000E+00	0.0000E+00
MAXIMUM	0.9170E+00	0.9170E+00	0.9170E+00

PLOT NUMBER 4
RUN NUMBER 1

SCALES OF PLOT

L=MIN CBE FM S0.000E+00 0.500E+01 0.100E+02
H=MAX CBE FM S0.000E+00 0.500E+01 0.100E+02
A=AVG CBE FM S0.000E+00 0.500E+01 0.100E+02

```
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  L                         +                         + LH LA
  0.1993E+04  +    L                    +                         + LH LA
  0.1994E+04  +  L                      +                         + LH LA
  0.1995E+04  + L                       +                         + LH LA
  0.1996E+04  + L                       +                         + LH LA
  0.1997E+04  +  L                      +                         + LH LA
  0.1998E+04  + L                       +                         + LH LA
  0.1999E+04  + L                       +                         + LH LA
  0.2000E+04  +   L                     +                         + LH LA
  0.2001E+04  + L                       +                         + LH LA
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD
```

OUTPUT CONSISTS OF 10 POINT SETS (30 POINTS)

TABLE NUMBER 5
RUN NUMBER 1

YEAR OF PAYLOAD	MIN TQS NEEDED	MAX TQS NEEDED	AVG TQS NEEDED
0.1992E+04	0.1000E+01	0.1000E+01	0.1000E+01
0.1993E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1994E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1995E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1996E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1997E+04	0.4000E+01	0.4000E+01	0.4000E+01
0.1998E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.1999E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.2000E+04	0.2000E+01	0.2000E+01	0.2000E+01
0.2001E+04	0.2000E+01	0.2000E+01	0.2000E+01
MINIMUM	0.1000E+01	0.1000E+01	0.1000E+01

MAXIMUM 0.4000E+01 0.4000E+01 0.4000E+01

PLOT NUMBER 5
RUN NUMBER 1

SCALES OF PLOT

L=MIN TQS NEED0.000E+00 0.500E+01 0.100E+02
H=MAX TQS NEED0.000E+00 0.500E+01 0.100E+02
A=AVG TQS NEED0.000E+00 0.500E+01 0.100E+02

```
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD

  0.1992E+04  +    L                  +                        + LH LA
  0.1993E+04  +         L             +                        + LH LA
  0.1994E+04  +         L             +                        + LH LA
  0.1995E+04  +         L             +                        + LH LA
  0.1996E+04  +         L             +                        + LH LA
  0.1997E+04  +                   L   +                        + LH LA
  0.1998E+04  +         L             +                        + LH LA
  0.1999E+04  +         L             +                        + LH LA
  0.2000E+04  +         L             +                        + LH LA
  0.2001E+04  +         L             +                        + LH LA
                0   10   20   30   40   50   60   70   80   90  100 DUPS
YEAR OF PAYLOAD
```

OUTPUT CONSISTS OF 10 POINT SETS (30 POINTS)